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Eastern Europe

Situation and Outlook Report

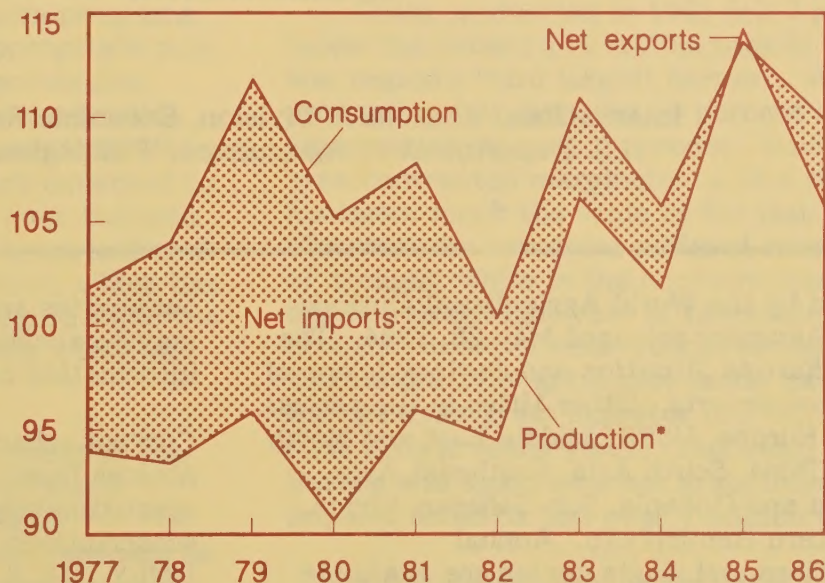
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Region's Grain Production and Use

Million metric tons



* Preceding year's production.

Drought strikes southern countries, region once again a net importer.

Effects of Chernobyl accident, p. 26.

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SUMMARY

The East European economies continued to recover from the crisis situation of the early 1980's, but growth in 1985 was slower than in 1984. Three principal factors were responsible for the unsatisfactory economic performance last year: The unusually cold 1984/85 winter weather, unforeseen foreign exchange shortages, and a further decline in economic incentives. Growth in national income slowed considerably in 1985, compared with the previous 2 years.

Rising production costs and falling world prices for agricultural exports reduced farm profitability, held back production, particularly of livestock, and slowed the pace of reform in some countries. Although prices paid to producers by state procurement agencies for agricultural commodities rose in nearly every country during 1985 or early 1986, farm profitability declined in several countries. Retail food prices continued to rise in most countries.

The progress of economic reform in Eastern Europe has been uncertain. Officials in Hungary and Bulgaria, the countries with the most noted agricultural reform programs, have become skeptical of the appropriate role of reform in their agricultural economies. Limited reform continues in Czechoslovakia and the German Democratic Republic (GDR). Although agricultural reforms are expected to continue their uncertain course over the next year, 1986 may signal a change in agricultural policy because livestock production, which has been deemphasized across the region since the early 1980's, appears to be making a limited comeback.

The extent to which the accident at the Chernobyl nuclear power plant affected Eastern European agriculture is still uncertain. The area most affected appears to be northeastern Poland, which contains about a fourth of the country's population and about the same proportion of agricultural production. Following the accident, the European Community imposed a temporary ban on farm product imports from Eastern

Europe and the Soviet Union. The ban expired on May 31 and was replaced by a uniform set of radioactive standards applicable to food imports from all sources. The U.S. response was to review the standards for radioactive contamination of foods and to communicate them to European countries that export food to the United States.

Overall nominal investment in agriculture rose marginally in the region last year, reflecting continued economic austerity. Regional use of chemical fertilizers declined due to inadequate supplies and, in a few countries, because of more efficient application methods and efforts to curtail overuse. Inventories of major agricultural machinery rose again last year. However, the farm machinery sector continues to be plagued by shortages of spare parts and fuel. Eastern Europe's perennial lack of storage space for crops and inputs has been exacerbated by recent crop surpluses and record grain yields. Input prices were raised in most of the region in 1985, and plans call for further increases this year.

Grain production in 1985 fell 7 percent below the record 114 million tons in 1984, but was region's third largest harvest. Wheat production fell just over 10 percent and coarse grain output was off 6 percent. Harvested area contracted marginally to 28.6 million hectares, much the same as the last 5 years. The southern countries suffered another year of drought, while in the northern countries, the fourth straight year of favorable weather brought record or near-record production. The record 1984 grain crop made Eastern Europe a net grain exporter in 1985 for the first time in many years. This year, Eastern Europe will again be a net grain importer. Net imports could be just over 4 million tons.

Total oilseed production, at 4.7 million tons, was almost unchanged from 1984. Soybean output, on the other hand, declined 21 percent due to dry weather. Sunflowerseed production, which is generally more drought-resistant, fared considerably better,

rising 1 percent. Rapeseed output advanced 11 percent, based on a 19-percent increase in Poland. Total East European oilseed meal imports fell an estimated 6 percent in 1985 to 4.2 million tons, while soybean imports plunged 36 percent.

Sugarbeet production fell more than 6 percent and area planted declined in every country but Yugoslavia. The production of refined sugar declined by about 5 percent. Potato production was off slightly from 1984, but above the 1980-84 average. Eastern Europe imported just under 800,000 tons of lint cotton last year, about the same as in 1984.

Regional livestock production declined slightly in 1985, but there were substantial differences among countries. Production continued to expand in the northern countries, while drought-reduced feed supplies, escalating production costs, and lower world prices for meat exports reduced output in the southern countries. Animal numbers fell throughout the region last year, although meat production was virtually unchanged at 12.2 million tons. Market supplies of livestock products were also unchanged. Meat exports likely remained the same or declined slightly.

Overall, the East European trade balance deteriorated markedly in 1985. While all countries except Yugoslavia realized a surplus in their hard currency merchandise trade, the hard currency surpluses were less than planned in all countries. The poorer trade balance stemmed primarily from the harsh winter of 1984/85, which caused above-plan energy imports in most countries. Exports were hurt mainly by below-plan industrial production resulting from energy shortages and difficulties in transporting essential inputs. However, with the notable exceptions of Yugoslavia and Poland, the hard currency debt of Eastern Europe is slowly becoming more manageable.

U.S. agricultural exports to Eastern Europe in calendar 1985 fell 37 percent from a year earlier to their lowest level since 1972. Exports to all countries except Bulgaria fell precipitously. Total grain exports came to \$113 million, down 29 percent from 1984. The most dramatic decline was in U.S. soybean exports, which fell from \$228 million in 1984 to \$81 million. Little change in agricultural exports is expected in 1986. For fiscal 1986, exports are projected at \$540 million, up slightly from \$531 million in fiscal 1985.

GENERAL ECONOMIC SITUATION

The East European economies continued to recover from the crisis situation of the early 1980's, but their growth in 1985 was slower than in 1984. In Czechoslovakia, national income grew at about the same pace as in 1984, 3.3 percent, but in all other countries the growth was less than the year before. National income actually decreased in Hungary, and growth in Yugoslavia was negligible. The reported national income increase of 5.9 percent in Romania is difficult to reconcile with continuing disruptions throughout the economy. For the region, Yugoslavia's economy showed the least progress while that of the German Democratic Republic (GDR) expanded quickly and steadily. With respect to their 1985 plans, Czechoslovakia and Poland were about on target, GDR surpassed its goal, and the other countries were behind, despite rather modest goals.

Causes of Unsatisfactory Performance

Three principal factors were responsible for the unsatisfactory 1985 economic performance: the weather, unforeseen foreign exchange shortages, and a further decline in economic incentives. The unusually cold 1984/85 winter disrupted the transportation network, caused energy shortages, closed factories and mines, added to the import bill, and harmed winter grain crops in Romania and Bulgaria. This was followed by a severe spring and summer drought in the southern countries that badly affected crop harvests and hydroelectric power output.

Foreign exchange shortages resulted from foreign debt repayment obligations, coupled with higher-than-expected interest on gross hard currency debts, below-plan exports, and low world agricultural prices, which reduced export earnings. Decreased earnings made it difficult to import spare parts, machinery, and

raw materials from the West necessary to maintain production and exports. Worst affected were Poland, Yugoslavia, Romania and Hungary.

In addition, Yugoslavia's inflation rate—over 75 percent during 1985—was the highest in Europe. Inflation was also high in Poland, at roughly 15 percent, but more moderate in Hungary, at 7 percent.

Production Growth Slows

Compared with the previous 2 years, the region's national income growth slowed considerably. Industrial production grew more slowly than in 1984 and was below plan in all countries except the GDR and Czechoslovakia. The GDR showed impressive gains for the third consecutive year, with both

national income and industrial production reportedly growing more than 4 percent. However, Eastern Europe's agricultural sector performed the poorest, with overall output below 1984's record despite good performance in the northern countries.^{1/} While the harsh winter mainly affected industrial performance, the prolonged summer drought proved disastrous to agriculture in the south.

Agricultural production declined 6 to 8 percent in Bulgaria, Hungary, and Yugoslavia; and increased slightly in Poland. Production probably also declined in Romania, although official Romanian reports indicate it was about the same as in 1984. Only

1/ Northern countries: Czechoslovakia, German Democratic Republic (GDR), and Poland. Southern countries: Bulgaria, Hungary, Romania, and Yugoslavia.

Principal economic indicators

| Indicator and year | Bulgaria | Czechoslovakia | GDR | Hungary | Poland | Romania | Yugoslavia |
|--------------------------------|----------|----------------|--------|---------|----------|-----------|------------|
| Percent change | | | | | | | |
| <u>National income</u> | | | | | | | |
| 1984 plan | 3.8 | 3.0 | 4.4 | 1.5-2.0 | 2.6 | 7.3 | 2.0 |
| 1984 actual | 4.6 | 3.3 | 5.5 | 2.7 | 5.0-6.0 | 7.7 | 1.7 |
| 1985 plan | 4.1 | 3.2 | 4.4 | 2.5 | 3.0-3.5 | 10.0 | 2.5 |
| 1985 actual | 1.8 | 3.3 | 4.8 | -1.0 | 3.0 | 5.9 | 0.5 |
| 1986 plan | 4.0 | 3.5 | 4.4 | 2.3-2.7 | 3.1-3.4 | 10.0-12.0 | 3.0 |
| <u>Agricultural production</u> | | | | | | | |
| 1984 plan | 3.1 | 0 | 0.6 | 3.0-4.0 | 1.5-2.0 | 5.4-6.0 | 2.0 |
| 1984 actual | 6.8 | 3.6 | (4.5) | 2.5-3.0 | 5.7 | 13.3 | 1.2 |
| 1985 plan | 3.2 | 0 | 0.8 | 1.0 | -0.8-1.4 | 6.0-6.8 | 2.5 |
| 1985 actual | -7.2 | 4.0 | 1.4 | -6.0 | 0.9 | 0.1 | -8.0 |
| 1986 plan | 7.4 | 2.5 | 0.3 | 3.0-3.5 | 1.1-2.7 | 6.0-7.0 | 8.0 |
| <u>Industrial production</u> | | | | | | | |
| 1984 plan | 5.0 | 2.9 | 3.6 | 1.5-2.0 | 4.5 | 6.7 | 3.0 |
| 1984 actual | 4.5 | 3.8 | 4.2 | 3.0 | 5.3 | 6.7 | 5.5 |
| 1985 plan | 5.2 | 3.0 | 3.8 | 3.0 | 4.0-4.5 | 7.5 | 4.0 |
| 1985 actual | 4.0 | 3.4 | 4.5 | 1.0 | 3.8 | 4.9 | 2.7 |
| 1986 plan | 4.5 | 2.9 | 4.3 | 2.0-2.5 | 3.2-3.6 | 7.0 | 3.0 |
| <u>Capital investment</u> | | | | | | | |
| 1984 plan | 1.9 | 0 | (-8.0) | -10.0 | -2.8 | 4.0 | -10.0 |
| 1984 actual | -0.7 | 4.4-5.0 | (-5.0) | -1.0 | 8.0 | 6.1 | -9.4 |
| 1985 plan | 8.0 | 9.5 | 0 | 0 | -1.2 | 8.3 | 0 |
| 1985 actual | 2.5 | 6.5 | 2.0 | NA | 5.0 | 1.6 | -10.0 |
| 1986 plan | 12.0 | NA | 1.7 | 0 | 4.2 | 6.0-8.0 | 2.0 |
| <u>Per cap. real income</u> | | | | | | | |
| 1984 plan | 2.5 | NA | 3.2 | 0 | 1.0-2.0 | NA | NA |
| 1984 actual | 2.7 | 1.6 | 3.9 | 1.0 | 1.0 | NA | -6.0 |
| 1985 plan | 3.0 | NA | 4.0 | 1.5-2.0 | 0 | NA | NA |
| 1985 actual | (1.0) | (3.0) | (4.5) | 1.0-1.5 | (0) | NA | 2.0 |
| 1986 plan | 2.0 | NA | 4.0 | 1.0-1.5 | 0 | NA | NA |

NA = Not available. () = Estimate. 1/ Socialized sector only.

Source: State plan and plan fulfillment reports from the respective countries.

Czechoslovakia and the GDR experienced better-than-planned farm production, the latter registering a record year.

Incomes and Consumption Levels Stagnate

The weaker economic performance adversely affected personal incomes and living standards. Per capita income appears to have increased impressively in the GDR and satisfactorily in Czechoslovakia and Yugoslavia, but it was below plan in Hungary and Bulgaria, may have declined in Romania, and did not register any change in Poland. Food supplies in Poland increased and only meat and chocolate were still rationed, though consumption levels remained below the 1979 level. In Romania, high farm exports necessitated by the foreign debt repayment burden contributed to the continued rationing of key food products. Long lines were still seen in front of food stores in Poland, and Romania, but shortages of high quality food and consumer goods existed in all countries in the region, including the GDR.

Outlook for 1986

Eastern Europe's Economic performance in 1986 is likely to be above the 1985 level, including agriculture. The 1985/86 winter was not as severe as the previous one and snow cover was adequate to ensure good winter crop yields, at least in the northern countries. The severe drought that occurred last year in the Balkans is unlikely to recur. However, because of foreign exchange constraints, the scarcity of inputs and spare parts for machinery and equipment will continue to limit both agricultural and industrial production. Such constraints are likely to be aggravated because of the nearly 3 week ban on food imports from most of Eastern Europe imposed by the European Community (EC) following the Chernobyl nuclear plant accident.

Also, lack of progress on economic reforms will reduce production incentives. Rather timid producer price increases in the GDR and consumer price increases in Poland, the retention of subsidies, and administrative and organizational adjustments in the Romanian and Bulgarian economic systems will be insufficient to spur economic performance. (*Francis Urban*)

AGRICULTURAL PRICES AND POLICY

Agricultural policies in Eastern Europe stress higher output and food self sufficiency through more efficient production, less reliance on price subsidies, and minimal imports. However, rising production costs, and falling world prices for agricultural exports have reduced farm profitability, held back production, particularly of livestock, and slowed the pace of reform in some countries.

Producer and retail prices are up in several countries as officials seek to shift more of the costs of food production to consumers and farms. Subsidies remain high nonetheless, and there is evidence that some governments may now be less committed to price reform because of consumer opposition and the negative production effects of higher input costs.

Producer Prices Up

Prices paid to producers by state procurement agencies for agricultural commodities rose in nearly every country during 1985 or early 1986. Prices are adjusted regularly in the GDR, Hungary, and Poland in response to changes in producer costs and in an attempt to influence crop and livestock plans. In Poland, these adjustments occur each July. In 1985, wheat and barley prices again rose faster than rye prices to shift area out of rye. Prices for slaughter cattle, hogs, and milk rose between 12 and 17 percent.

Hungarian prices last year rose more for corn than for other grains to increase area sown to corn. A tax credit, based on harvested corn area, was also introduced. Average producer prices of goods processed by the food industry in Czechoslovakia rose nearly 13 percent last year with the largest increases for milk, cattle, poultry, eggs, sugarbeets, grain, and fruits and vegetables.

Additional price increases were announced earlier this year. In the GDR, prices for several crops, including grain and rapeseed, and livestock products (milk, slaughter hogs, and slaughter cattle) rose. Hungarian officials were compelled to raise producer prices for slaughter livestock in early 1986 because of unanticipated declines in animal numbers last year. A surcharge on milk producer prices is planned for this year to support cattle production. Prices for milk in

Poland increased again in March 1986 to stem a continuing decline in cattle profitability.

Farm Profitability Suffers

Despite higher producer prices, farm profitability declined in several countries because of rising costs. Polish officials, for example, claim that the July 1985 price hikes covered only 80 percent of the rise of production costs. As a result, not only did profitability suffer, but farm income fell to just 80 percent of urban income, the lowest in several years. There is concern that this situation will seriously slow farming's recovery from the crisis of the early 1980's.

Hungarian officials blame last year's lack of growth in agricultural income on poor profitability. Rising domestic costs were exacerbated by sagging export prices—one third of Hungarian farm output is exported—and reduced support from the central government. In Yugoslavia, high inflation and interest rates, along with controlled prices for some farm commodities, resulted in large financial losses for many agricultural producers and processing firms.

Higher Retail Prices, Improved Food Supplies

Retail food prices continued to rise in most countries. The GDR alone remained committed to price stability, and opted to raise subsidies. Price rises were highest in Yugoslavia, where 1985's inflation rate rose one-third to over 75 percent. Prices for flour, bread, sugar, cooking oil, and meat rose substantially. Retail prices for bread and flour rose an additional 10 percent in April 1986.

Last year's Yugoslav price rises were so severe that the Federal Price Office reinstated price controls economywide for 1986. Under these controls, prices for food products, such as meat and sugar, are allowed to rise, but the Federal Price Office must agree to any proposed increase. The federal government retains direct control over wheat flour and vegetable oil prices.

Hungarian retail prices for milk and dairy products were increased nearly 30 percent in 1985, the first rise in many years. As a result, the average retail price subsidy for these goods was cut more than half to 34 percent. Sugar, canned meat and fish, frozen meat, and confectionery product prices also rose.

Retail food prices in Poland rose an average 12–13 percent in 1985. Prices of several nonmeat foods increased again in March 1986, and meat prices are slated to rise by up to 8 percent in August. Despite the increase in prices, the cost of price subsidies for food products climbed 29 percent in 1985—well above the inflation rate—and they should increase again this year, but at a slower rate. Officials estimate that retail prices of basic foods would have to increase 30 percent to cover all production costs and provide a profit. In the GDR, where retail food prices have remained stable for years even as producer prices have risen, food price subsidies will account for almost 20 percent of 1986's national budget.

Food supplies generally remained unchanged or improved, except in Romania and possibly Bulgaria, where they were strained by a severe drought in 1985. The biggest improvement was in Poland, where rationing of flour, animal fats (including butter), and margarine ended. However, meat and chocolate will continue to be rationed at least until the late 1980's.

Because of improved pork supplies and a ubiquitous black market, the Polish Government took a major step earlier this year to liberalize meat sales. Private meat markets were allowed in several Polish counties on an experimental basis and under strict control. Buyers and sellers negotiate prices. Consumer and producer response has been limited but the existence of these free markets and their possible expansion are seen as steps toward removing countrywide meat rationing.

Economic Reforms Slowed

Officials in Hungary and Bulgaria, the East European countries with the most noted agricultural reform programs, appear more skeptical than before of the appropriate role of reform in their agricultural economies. For example, the Hungarian Government has been forced to raise subsidies to livestock producers for the first time since the late 1970's and restrict price increases for inputs. This action was taken because livestock exports are an important hard currency earner, but rising costs have seriously decreased production incentives. Increasing subsidies and holding down input prices run counter to the

Hungarian reform effort but they highlight the premium placed on maintaining supplies of foreign exchange.

The most startling reform-related event, however, occurred in Bulgaria earlier this year. The much-heralded National Agro-Industrial Union (NAPS in Bulgarian) was put under a reconstituted Ministry of Agriculture and Forestry. In 1979, NAPS replaced the Ministry of Agriculture and the Food Industry, assumed control over agricultural machine building, and gained ministerial ranking. NAPS, along with new farm production brigades at the local level, had been the organizational spearhead of a major reform effort to reduce production costs and increase output. Its organizational demotion suggests fundamental disappointment with, and blame for, the negligible progress to date in reducing production expenses.

Limited reform continues in Czechoslovakia and the GDR. Czechoslovak state and collective farms were granted more freedom this year to determine what commodities to produce and in what manner. Producers now face only two binding production indicators from federal authorities: procurement delivery quotas for grain and for slaughter livestock. Officials in the GDR credit managerial reforms and 1984's producer and input price changes for a significant portion of 1984's and 1985's high output. These managerial reforms consisted of granting regional agricultural councils a major role in coordinating interfarm cooperation between livestock and crop production units and other related enterprises such as agrochemical centers.

In Romania, the Ministry of Agriculture and the Food Industry was split in two late in 1985. The result is the Ministry of Agriculture and a new Ministry of Food Industry and the Purchase of Agricultural Products. The latter is responsible for all agricultural procurement and processing, plus supplying the domestic and export markets. The action is another in a series of organizational changes in Romanian agriculture that will have little impact on production or trade. Despite official rhetoric, there has been no loosening of central control of Romanian agriculture nor reform of wage, price, and marketing policies.

Shift in Policy Underway?

Although agricultural reform should continue its uncertain course over the next year, 1986 may signal the start of a change in agricultural policy. Livestock, which has been deemphasized across the region since the early 1980's, appears to be making a limited comeback.

The good harvests of the last 3 years in Poland, plus the political imperative of raising living standards, have caused the Polish Government to plan a faster increase in livestock output than crops this year. This is the first such planned increase in livestock production in years. Hungarian officials are also giving more attention to livestock because of its foreign trade importance, despite its high production costs.

In Czechoslovakia and the GDR, there are no longer calls for significant reductions of livestock output. Yugoslav officials will have to devote more attention to livestock because of the severe cost squeeze on producers. The future of livestock as an important foreign exchange earner depends heavily on reducing the sector's high production costs.

Improved food quality rather than increased consumption will also be stressed. The exceptions are Poland, where higher consumption will be pursued, and Romania, where domestic food supplies will continue to be grossly inadequate. Higher production efficiency, use of improved production technology, minimal imports and, for the southern countries, higher farm exports will also characterize agricultural policy through 1987. (*Robert Cummings*)

INVESTMENT AND INPUTS

Overall nominal investment in agriculture rose marginally in the region last year, reflecting continued economic austerity. In some countries, high levels of depreciation and inflation indicate that capital stock in agriculture showed little real growth.

In the GDR, total investment rose substantially in 1985, the first significant increase since the early 1980's. Growth in Polish total and farm investment was above the planned level. Adequate investment in

agriculture, particularly the food industry, was a key element of Poland's 1985 economic plan, but it remained insufficient. In Czechoslovakia, agricultural investment exceeded the planned level. Investment was essentially unchanged in Hungary and Romania last year, and was far less than planned in the latter.

Agriculture's share of total investment showed little change in 1985, ranging from 8 percent or less in Bulgaria, the GDR, and Yugoslavia to about 20 percent in Poland.

Farm investment this year is planned to increase in most of the region. In Hungary, for the first time since 1979, investment in the agricultural sector is expected to show an appreciable gain, especially in support of agricultural research.

Fertilizer Production and Use Down

Regional use of chemical fertilizers declined last year because of inadequate supplies and, to a lesser extent, because of more efficient application methods and efforts to curtail overuse.

The East European countries have long pursued a course of improving yields by increasing fertilizer applications. However, most countries have chronically lacked the necessary fertilizer supplies to do this. In 1985, due largely to production difficulties associated with the unusually harsh winter and severe energy shortages, fertilizer supplies in most countries proved especially scarce. Production of nitrogen fertilizers in Poland fell by more than 20 percent, possibly reducing the grain harvest by 1-1.5 million tons.

Fertilizer use in Eastern Europe 1/, 1975 and 1982-85

| Country | 1975 | 1982 | 1983 | 1984 | 2/ 1985 |
|------------------------------|------|------|------|------|---------|
| Kilogram/hectare arable land | | | | | |
| Bulgaria | 156 | 250 | 244 | 239 | 235 |
| Czechoslovakia | 295 | 321 | 340 | 341 | 336 |
| GDR | 370 | 281 | 290 | 314 | 320 |
| Hungary | 276 | 288 | 301 | 288 | 255 |
| Poland | 229 | 226 | 215 | 231 | 221 |
| Romania | 88 | 102 | 110 | 110 | 107 |
| Yugoslavia | 90 | 120 | 118 | 125 | 123 |
| Total | 199 | 208 | 210 | 216 | 210 |

1/ Nitrogen, phosphate, and potassium in nutrients.
2/ Estimates.

Sources: Statistical yearbooks of respective countries and 1985 country plan fulfillment reports.

Similar production shortfalls and supply shortages prevailed in most of the region.

Fertilizer production is planned to rise this year in most of Eastern Europe. However, Romania, which is calling for a 20-percent increase in production, appears to be particularly optimistic but is very unlikely to reach such a target.

In recent years, increasing problems associated with the overuse of fertilizers have caused a few countries to reevaluate their application policies. Excessive use of chemical fertilizers, particularly in the GDR and Hungary, has caused rising soil acidity, rendering land increasingly infertile. To halt the acidification, these countries are applying larger quantities of lime.

The GDR, in addressing the problem of fertilizer overuse, developed last year a system that enables its farmers to identify soil content at selected intervals. About one-third of the GDR's fields are being fertilized in accordance with so-called "field cards," which are computer-aided calculations that determine fertilizer needs by different crops. Initial results show reduced fertilizer application rates.

Pesticide Problems Persist

Insufficient supplies of plant protection agents (PPA's) remain a problem. The chief ingredients used in pesticide production are largely imported from the West, and purchases of PPA's continue to suffer from cutbacks in hard currency imports. In the case of Czechoslovakia, 75 percent of all imported PPA's are purchased annually from Western producers and it is estimated that without these imports, wheat yields, for example, could decline by nearly 30 percent.

While Poland was able to treat with pesticides nearly 1 million more hectares of arable land in 1985 with pesticides (the result of a 10-percent rise in supplies), the need to increase PPA imports further is paramount. Despite the increased availability, imports of PPA ingredients were still about 25 percent below planned amounts. A similar situation is feared this year because of continued severe financial constraints. In Yugoslavia, pesticide supplies were more abundant in 1985, the outcome of the National Bank's policy giving

priority to imports needed in the production of PPA's and fertilizers. However, since substantial price increases for these inputs significantly reduced demand, applications probably did not increase.

To combat mildew and cereal rust, more fungicides than ever before were made available in the GDR last year. Scientific surveys indicate that grain yields increased by 0.3 to 0.5 tons per hectare in 1985 because of greater fungicide applications.

High Priority for Land Improvement, Few Results

Use of excessively heavy and large machinery, which has severely compacted soils and exacerbated erosion problems, has contributed to the deterioration of the region's soils. Increased application of organic fertilizers, including manure, is being stressed throughout the region to improve the extremely low field humus content of the area's soils.

The severe drought affecting the southern countries in 1985 once again underlined the urgency of improving irrigation and drainage facilities. Agricultural output in Bulgaria, in particular, was devastated by the combined effects of widespread water shortages and neglected irrigation infrastructure.

Despite increased needs, newly irrigated and drained areas for Eastern Europe as a whole were actually less last year than in 1984. In Poland, around 3.5 million hectares of land still await drainage or irrigation for the first time. Since 1979, newly improved areas have been smaller than those on which facilities have been taken out of operation. According to Polish sources, more comprehensive irrigation or drainage could increase overall crop yields by about 1.5 tons per hectare.

The Romanians announced that the main thrust of their 1986-90 agricultural investment plan is the "national program of land improvement," incorporating extensive irrigation and drainage work. Even the military was given a part in the program and is now responsible for the irrigation of 1.5 million hectares. In 1985, Hungary instituted a program to reimburse 40-70 percent of a farmer's costs incurred in improving irrigation

facilities. Subsidies for the development of irrigation networks are to be continued in Hungary this year as well.

Little Improvement in Machinery Sector

Overall inventories of major agricultural machinery rose again last year in Eastern Europe. Tractor numbers increased 8 percent, primarily due to growth in Yugoslavia's and Poland's inventories, up 15 and 6 percent, respectively. Overall combine numbers advanced by 14 percent, with Romania accounting for most of the change.

Despite these improvements, the farm machinery sector continues to be plagued by shortages of spare parts and fuel. Reports indicate that almost 25 percent of all Polish combines were inoperable during the 1985 harvest due to missing parts or much needed repairs. In Hungary, 40 percent of the trailers and over 25 percent of the trucks in the farm sector are said to be fully depreciated.

In Romania, fuel was in such short supply that in at least one county authorities directed that all sunflower harvesting be done by hand. More generally, to conserve fuel, the Government is encouraging the performance of more work by hand, horse, and oxen. Bulgaria and Yugoslavia were also confronted with debilitating energy disruptions in 1985.

Storage Facilities Inadequate

The perennial lack of storage space for crops and inputs in Eastern Europe has been exacerbated by recent crop surpluses. In Czechoslovakia, grain is often put in temporary storage, where its quality is subject

Tractor and grain combine numbers, Eastern Europe, 1983-85 1/

| Country | Tractors | | | Grain combines | | |
|----------------|----------|-------|---------|----------------|------|------|
| | 1983 | 1984 | 1985 | 1983 | 1984 | 1985 |
| 1,000 units | | | | | | |
| Bulgaria | 60 | 58 | 57 | 9 | 9 | 9 |
| Czechoslovakia | 132 | 134 | 136 | 18 | 18 | 19 |
| GDR | 150 | 153 | 156 | 15 | 15 | 16 |
| Hungary | 55 | 56 | 55 | 13 | 12 | 12 |
| Poland | 757 | 805 | (853) | 46 | 49 | 52 |
| Romania 2/ | 169 | 168 | 174 | 38 | 43 | 58 |
| Yugoslavia 3 | 622 | 706 | 809 | 9 | 9 | 10 |
| Total | 1,945 | 2,080 | (2,240) | 148 | 155 | 176 |

() = Estimate. 1/ As of January 1. 2/ Self propelled combines only. 3/ All types of combines.

Sources: CEMA statistical yearbook and statistical yearbooks of Poland and Yugoslavia.

to deterioration. Czechoslovak officials plan to add up to 500,000 tons of the 1985 harvest to stocks, but the grain's moisture content is high and drying facilities are inadequate. The capacity of Poland's drying and storage facilities is more than 100,000 tons short. In Yugoslavia, inadequate sugarbeet storage and processing capacity pose significant financial dilemmas for producers and processors. The GDR lacks storage facilities for 30 percent of its fertilizer supplies. An estimated 5 percent of supplies are lost annually due to open storage.

Most country plans call for expansion of capacities for storing, refrigerating, and stockpiling. Czechoslovakia plans to construct new storage facilities at agricultural enterprises rather than at central depots. Hungary is providing subsidies to build storage space. The GDR hopes that by increasing localized storage facilities, it can also lessen transportation costs.

Input Prices Raised

Input prices were raised in most of the region in 1985, and plans call for further increases this year. These increases should lessen the burden of state subsidies and encourage more efficient use by farms.

Last year in Yugoslavia, fertilizer prices rose more than 50 percent and fuel and machine oil prices advanced 60 percent. Poland raised prices on tractors, tires, spare parts, fuel, and some PPA's; however, input subsidies were 40 percent greater than in 1984. Beginning January 1, 1986, Czechoslovakia abolished state support of fertilizer prices, and prices rose by 15 percent. The GDR, continuing on the course outlined in the Agrarian Price Reform of 1984, raised fertilizer and pesticide prices again in 1986. Input price increases there have been somewhat offset, however, by increased procurement prices. Hungary, while raising most state subsidies for farm inputs in 1986, decreased subsidies on fertilizers, PPA's, and equipment for small-scale farmers. (*Christian J. Foster*)

GRAIN AND FEED

Grain production in 1985 is estimated at 106 million tons, 7 percent below the 1984 record but well above 1976-80 average (table

1). Wheat production fell 11 percent and coarse grain output was off 6 percent. Harvested area contracted marginally to 28.6 million hectares, much the same as the last 5 years (table 2). The southern countries suffered another year of drought, while record or near-record production in the northern countries resulted from the fourth straight year of favorable weather. The harvest of nongrain feeds was likewise generally good in the northern countries and poor in the south.

Favorable producer prices vis-a-vis livestock production and priority allocation of fertilizers, machinery, and other inputs combined with the weather to continue the string of generally good harvests that began in 1982. However, profitability has become a concern as the quest for higher yields, implicit in grain self-sufficiency policies, has raised marginal production costs.

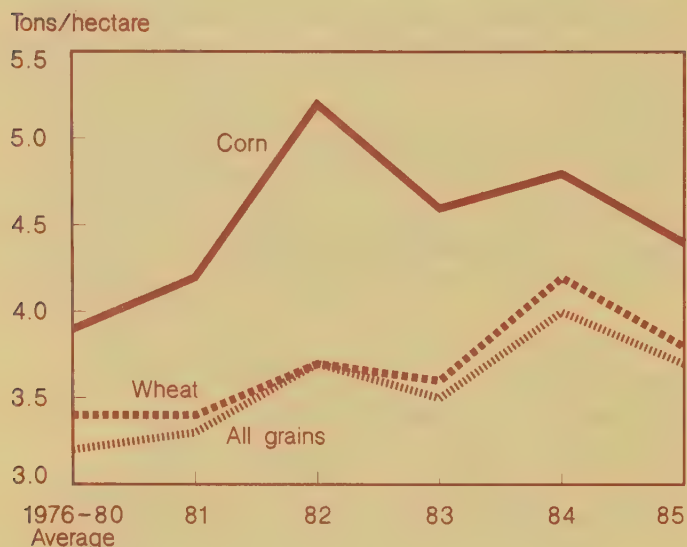
Eastern Europe was likely a slight net grain exporter last year, but lower 1985 production will return the region to its traditional status of net grain importer this year.

Production Continues High Despite Drought in South

Last year's relatively good grain crop reflected record and near-record production in the northern countries. Adequate snow cover protected fall-sown grain against very cold temperatures, and an excellent growing season more than compensated for delayed spring work. Production in the GDR was a record 11.6 million tons. Poland may well have had another record harvest if not for a decline in nitrogen fertilizer production suffered during the abnormally harsh 1984/85 winter.

The situation was the opposite in the southern countries. A cold, dry winter in Bulgaria forced farmers to plow under 300,000 hectares of fall grain before 1985 spring field work began. Spring work in Bulgaria and Romania was delayed up to 4 weeks because of the cold. The drought throughout the summer and fall completed the damage. Bulgarian irrigation facilities and water supplies could not keep up and grain production fell an estimated 45 percent to 5.1 million tons, the lowest since 1963. Wheat production suffered the most, down an estimated 2.1 million tons.

Grain Yields in Eastern Europe



Conditions were nearly as severe in Romania, although the 1985 crop was officially announced at 23.1 million tons, just 2 percent below the 1984 record. Continued food shortages, recent Romanian purchases of U.S. grain, and a decline last year in animal numbers indicate another year of overstated production. Romanian practice is to report output on a bunker-weight basis, including the weight of corn cobs, so that actual food and feed availability of the 1985 crop could be as low as 70 percent of the reported output.

In Yugoslavia, delayed 1984 fall sowing and higher producer prices for corn led to a 13-percent decline in wheat output last year. Drought further reduced total grain output by cutting into corn yields and leaving the country with both the lowest corn and total grain crops in 4 years.

Feed Supplies Varied

Total feed supplies in 1985/86 will be good except in the southern countries. The drought in Bulgaria has cut mixed feed supplies and forced officials to engage in greater contract fattening with private producers. The private sector presumably has better access to grazing areas than do the large feedlots although the Government has also promised adequate feed supplies to fulfill contract obligations.

Sales of mixed feeds in Poland continue to expand and were reportedly up by 6.2 percent from 1984. Supplies remain inadequate,

however, and domestic wheat and barley have increased their share in Poland's feed rations at the expense of corn.

Exports Exceed Imports

The record 1984 grain crop made Eastern Europe a net grain exporter in 1985 for the first time in many years. Exports were an estimated 6.0-6.3 million tons, well above 1984 shipments of 3.8 million (table 3). Imports fell from 7.8 million tons in 1984 to 5.4-5.7 million last year.

Exports were up from nearly all countries, but especially from Hungary (largely wheat) and Poland (rye). Shipments from the region would have been even higher in 1984 and 1985 but for strict export controls imposed on corn in Yugoslavia in August 1984. The controls were designed to reduce feed costs for domestic livestock producers.

Increases in East European imports are expected in 1985/86, however. Grain imports may rise to 8.4-8.9 million tons while exports could decline to 4.2-4.7 million. Net imports will rise primarily in the southern countries. Bulgarian imports could well be a record high and approach 2 million tons. Romanian purchases may range from 1.0 to 1.3 million tons. Barley from Western Europe will make up a significant share of these imports, but U.S. corn exports will also benefit.

The northern countries, however, continue to reduce imports. Without a significant expansion in the livestock sector, grain imports by the GDR could fall to just below 2 million tons by 1987. In Poland, food wheat accounts for a large share of wheat imports, and larger production of high-gluten wheat varieties has decreased imports.

Outlook

Regional grain production in 1986 will likely be a repeat of last year with production between 105 and 110 million tons. Nearly all planned fall sowing was completed in the northern countries. Winterkill was minimal, and producer prices for certain grains rose in the GDR, Hungary, and Poland, ensuring a good start for the 1986 crop.

Dry weather in Bulgaria harmed emergence of 1985 fall-sown crops and similar

conditions delayed fall sowing in Yugoslavia. Fall wheat area, at 1.3 million hectares, was the smallest in the past 5 years in Yugoslavia and resulted from reduced producer interest in wheat because of higher costs and inadequate prices.

Nevertheless, regional wheat area should be similar to last year's because of expanded area in Poland and Hungary. Fall-sown wheat area in Hungary is up because of the lower cost of producing wheat relative to corn, despite tax and price incentives by the Government to maintain corn area.

Grain imports are forecast to decline in 1986/87. Assuming a return to more average production this year in the southern countries, imports could fall to about 6.5 million tons. (Robert Cummings)

OILSEEDS AND PRODUCTS

Total 1985 oilseed production, at 4.7 million tons, was almost unchanged from 1984 (table 4). Rapeseed production rose 11 percent, thanks to a record crop in Poland. Sunflowerseed production also rose, but because of drought in the southern countries, soybean production declined sharply. Oilseed and meal imports, and therefore meal consumption, were down slightly in 1985, reflecting a drawdown in animal herds in most countries. Assuming normal weather, production should rise in 1986, as plantings are to increase in major producing countries. Imports of oilseeds and meal may rise in the southern countries, but overall imports are likely to change little.

Oilseed Production Unchanged from Last Year

Soybean production totaled 598,000 tons in 1985, down 21 percent from last year; yields were down 12 percent. The two largest producers, Yugoslavia and Romania, suffered extremely dry weather during the summer, and Romania during the spring as well. Yugoslav production was down 24 percent, while Romania's fell 34 percent from the 1984 record.

Sunflowerseed production, which is generally more drought-resistant, fared considerably better, actually increasing 1

percent. Yugoslavia has made good progress in developing hybrids resistant to the fungal disease *phomopsis*. The result was a 37-percent expansion in area and a 51-percent rise in production (table 5). Romania's crop, on the other hand, declined 14 percent, primarily because of continuing devastation by the disease. Hungarian sunflowerseed production rose 17 percent, due to a 10-percent rise in area and increased yields.

Rapeseed production was up 11 percent, with a 19-percent increase in Poland. There was little change elsewhere. The quality of the Polish crop was said to be the best ever, with good oil content and a low percentage of erucic acid.

Imports Fall Sharply, Meal Consumption Down Slightly

Although complete data are unavailable, total East European oilmeal imports fell an estimated 6 percent last year from 1984's 4.5 million tons, while oilseed imports plunged 33 percent (table 6). Several factors contributed to the decline: the good harvests of 1984, a decline in livestock feeding, and continuing pressures to conserve hard currency and cut back imports. Because of high 1984 domestic production, the drop in meal consumption was only about 2 percent.

Oilseed meal utilization 1/, Eastern Europe, 1980-85

| Item | 1981 | 1982 | 1983 | 1984 | 2/ 1985 |
|-----------------------------------|-------|-------|-------|-------|---------|
| 1,000 tons | | | | | |
| Processing from domestic crops 3/ | | | | | |
| Soybean meal | 421 | 346 | 482 | 453 | 540 |
| Sunflower meal | 626 | 719 | 771 | 685 | 741 |
| Rapeseed meal | 651 | 588 | 601 | 717 | 956 |
| Fish meal | 82 | 77 | 52 | 52 | 52 |
| Imports | | | | | |
| Oilseed meal | 4,764 | 3,756 | 3,876 | 4,450 | 4,166 |
| Soybeans 4/ | 538 | 442 | 556 | 607 | 388 |
| Sunflower-seed 4/ | 37 | 37 | 3 | 32 | 41 |
| Fish meal | 309 | 325 | 366 | 320 | 302 |
| Exports | | | | | |
| Oilseed meal | 11 | 37 | 16 | 44 | 63 |
| Apparent meal consumption | 7,417 | 6,253 | 6,691 | 7,272 | 7,123 |

1/ Including fish meal. 2/ Preliminary. 3/ Estimated from preceding year's harvest minus exports. 4/ Converted to meal equivalent.

Source: Country yearbooks and FAO Trade Yearbook.

Poland is the only country that showed a significant increase in oilseed meal consumption in 1985. Imports of oilseed meal rose from 925,000 tons in 1984 to an estimated 1 million tons in 1985. With that increase and the rise in domestic rapeseed production, meal consumption rose about 19 percent. The rise reflects an 11-percent increase in hog numbers and constitutes a significant recovery from the extremely low consumption of 1983. Nevertheless, meal supplies remain well below those of the early eighties.

Most other East European countries experienced a decline in oilseed meal consumption. Hungarian meal imports, after peaking at 836,000 tons in 1983, fell to 742,000 in 1984 and an estimated 611,000 in 1985. As domestic crushing has changed little, consumption has fallen accordingly, mainly reflecting reduced hog and poultry inventories. Bulgarian meal imports, after reaching an extraordinarily high level of 418,000 tons in 1984, likely fell to about 300,000 tons in 1985. This volume still allows for a higher level of consumption than in the early eighties. Bulgarian officials say that the increase in meal consumption resulted from a shift in feeding practices to a higher protein content. Consumption in Czechoslovakia and the GDR likely changed little.

Yugoslav oilseed imports fell precipitously in 1985. Soybeans make up most of Yugoslavia's oilseed imports and these imports dropped from 331,000 tons in 1984 to 228,000 in 1985. Meal imports fell further from an already low level of 141,000 tons in 1984 to 128,000. Yugoslav meal consumption fell an estimated 11 percent, the most precipitous drop in Eastern Europe. For the most part, the decline resulted from falling demand for livestock feed. Forced slaughter in 1984 sharply reduced livestock inventories during 1985.

Romania has imported in previous years large amounts of oilseeds, primarily soybeans. Government policy has been to import at levels necessary to maintain operations in its crushing industry. Imports reached 331,000 tons in 1983 and 422,000 in 1984. Early in 1985, officials were confident that imports would reach a similar level in 1985. However, 1985 imports turned out to be an estimated 200,000 tons, probably due to below-plan exports and a consequent shortfall in hard

currency earnings. Even with this reduction in imports, Romanian meal consumption apparently changed little from 1984, thanks to a reported record 1984 soybean crop.

Consumption of Vegetable Oil Rises

Total consumption of vegetable oil in Eastern Europe rose by about 14 percent in 1985. The largest increase was in Poland, which, thanks to a large 1984 rapeseed crop, increased its oil output by almost 50 percent. The rise in East European consumption followed a 10-percent drop in 1984, so that 1985 consumption was only slightly above the 1983 level. And Poland, even with its large production increase, was still just barely able to meet domestic demand. Supplies were adequate elsewhere, and some countries, notably Hungary and Romania, were net exporters. In previous years, Yugoslavia suffered severe shortages of vegetable oil, but the situation has been alleviated in the past 2 years by rising sunflowerseed production and a government decision to allocate foreign exchange specifically for vegetable oil imports. Consumption should see a continued upward trend in 1986.

Higher Production, Lower Imports Expected in 1986

Soybean and sunflowerseed production should both rise in 1986. Assuming normal weather, Romanian production should be above the 1985 level. Yugoslavia is actively encouraging increased plantings of both crops. Prices of both are now quite favorable relative to other commodities; prices rises were instituted to reduce the need for imported meal and to satisfy a growing domestic demand for vegetable oil.

Rapeseed production may decline slightly. Some of the area planted in Yugoslavia last fall had to be plowed up because of insufficient soil moisture. A lower rapeseed area is also expected in Poland because of a delayed grain harvest that resulted in later than optimal rapeseed sowing. No increase in area is expected in the GDR or Czechoslovakia, but good soil conditions in all three countries should result in good yields.

For the region as a whole, 1986 imports of oilseeds and meals may show a slight gain,

with consumption changing little. Only Poland is likely to see an increase in meal consumption, while declines can be expected in Yugoslavia and Romania. Romanian imports may rise slightly, but not enough to compensate for the extreme shortfall in the 1985 crop. Yugoslav oilseed meal imports are expected to fall, but soybean imports through the end of April are ahead of last year. Total imports in soymeal equivalent will still not be sufficient to compensate for the 1985 production shortfall. The main reason is probably a continuing fall in demand. In addition, the recently passed Law on Foreign Exchange placed imports of soybeans and meal under quotas. Previously a firm's imports of these commodities were limited only by foreign exchange availability. (*Nancy Cochrane*)

SUGARBEETS, POTATOES AND COTTON

Sugarbeet Production and Sugar Output Steady

Sugarbeet production in 1985 was just over 47 million tons, down 7 percent from the record 50.7 million tons in 1984, but above the 1980-84 average. Area planted to sugarbeets declined in every country but Yugoslavia, with Poland experiencing the largest decrease.

Except for Czechoslovakia, sugarbeet production was down in all countries. A drop of 8 percent in Poland, the region's largest producer, accounted for most of the decline in total production. Production in Poland was 11 percent below a planned 16.5 million tons. The decrease resulted partly from a shift in sugar beet area to grains due to the high costs of beet production. Another factor was the heavy damage caused by the beet fly.

Although 1985 production was above plan in the GDR, it was still about 6 percent below 1984. In Romania, reported production was 8 percent less than in 1984, and a marked 40 percent below plan. Output marginally increased in Czechoslovakia.

The production of refined sugar declined by about 5 percent last year, from 6.1 million tons in 1984 to about 5.8 million. Poland and Romania are primarily responsible for the drop.

Sugar production in Poland fell 6 percent last year, declining for the third consecutive year. Nevertheless, beet supplies continue to exceed refining capacity and domestic sugar consumption is above desired levels. In late 1985, to underscore the need for greater efficiency in beet processing and a reduction in sugar consumption, the state abolished government subsidies to Polish sugar refineries, and raised retail sugar prices. At the same time, the Government ended 9 years of sugar rationing.

The sugar industry in many countries is plagued by high costs and obsolete plant and equipment. Officials, for example, now view the modernization of Poland's beet processing plants over the next few years as urgently needed to reduce processing costs and raise refining capacity. High costs result from outdated plants and energy-inefficient machinery. In Czechoslovakia, due to numerous technical and quality problems, only about 50 percent of the available sugar content of beets is extracted in processing.

Sugar refineries in Yugoslavia were particularly hard hit in 1985, faced with a 70-percent increase in energy costs and a 60-percent rise in sugarbeet prices. Moreover, processors had to absorb the cost of storing huge reserves of surplus sugar last year. Increased retail prices for sugar, however, partially offset the producers' financial burden. A special deal struck between Yugoslavia and Kenya in 1985, stipulating the exchange of 50,000 tons of refined sugar for fuel oil from Kenya, enabled Yugoslavia to dispose of some of its sugar stocks, as well as obtain badly needed oil.

Overall, Eastern Europe is a net importer of sugar and 1984 purchases of 1.4 million tons were near record. Most imports are in the form of raw sugar, mainly from Cuba. These imports are then domestically refined and, in many cases, reexported for hard currency. The largest net sugar importers are Bulgaria, the GDR, and Yugoslavia. Poland and Czechoslovakia are the primary net exporters. In 1985, estimated exports of refined sugar were down slightly from 1984's 868,000 tons.

Sugarbeet production in the region may increase in 1986. The GDR plans to raise production through increased yields, even

while planted area is to decrease. In Poland, to reverse the trend of declining area, the Government has increased the procurement price of beets by over 20 percent. Yugoslavia, likewise, plans to increase planted area.

Potato Production Stable

Potato production in 1985 was about 63 million tons, down slightly from 1984's 64 million, but above the 1980-84 average. The decrease reflects a 2-percent drop in area planted.

Potato production declined in all countries except the GDR and Romania. Although production increased only slightly in the GDR, the yield was record high, and the quality of the crop was excellent. Romanian output was a reported record of nearly 6.7 million tons, well above both the 1985 and 1986 plans. While output in Czechoslovakia was good last year, the quality of the crop was very poor. Potatoes were severely affected by mildew and wet rot and began to spoil soon after harvest. Winter storage and processing losses amounted to about 35 percent. Furthermore, current harvesting techniques are responsible for a substantial amount of mechanical damage to the crop. In Poland, production fell largely due to blight infestations.

Production in the region should increase in 1986 to about 65 million tons. Increases in producer prices, as in the GDR, and a small expansion in planted area should allow for this.

Cotton Imports Unchanged

All East European countries—including Bulgaria and Yugoslavia, the only cotton producers in the region—are net cotton importers. Production of seed cotton in the two countries amounts to less than 3 percent of total consumption in the area. The USSR is the primary supplier, providing over 60 percent of total imports. Other significant suppliers include Egypt, Greece, Sudan, Syria and, more recently, the People's Republic of China (PRC).

Complete trade data are available only through 1984, when the region imported 802,000 tons of lint cotton. Imports in 1985 were likely just under 800,000 tons, even though Yugoslavia imported a record 152,000

tons. A new development in the region is the expanding role of the PRC as a cotton supplier. Five-year (1986-90) trade agreements, signed between the PRC and several East European countries, call for progressively increasing Chinese deliveries, which will replace rather than supplement shipments from other sources. The extension of CCC credits to Hungary and Yugoslavia is unlikely to boost modest U.S. cotton exports to the region. (*Christian J. Foster*)

LIVESTOCK AND LIVESTOCK PRODUCTS

Overall regional livestock production declined slightly in 1985, but varied substantially among countries. Production continued to expand in the northern countries—growth in Poland was nearly 5 percent over 1984—while drought-reduced feed supplies, escalating production costs, and lower world prices for meat exports decreased output in the southern countries. Only poultry production is expected to expand significantly across the region in 1986. General livestock expansion in Poland will continue, however, as output recovers from the country's economic crisis of the early 1980's.

Animal Numbers Fall, Meat Production Steady

Animal numbers fell throughout the region last year (table 7). The largest decline was an estimated 5 percent drop in sheep numbers because of drought-reduced grazing areas in the southern countries. Estimated declines in Romania accounted for much of the regional loss in all livestock categories.

The drought and restrictions on feed imports were responsible for a nearly 3-percent decline in the poultry flock to approximately 456 million birds. The decline was the first in at least two decades for the region and highlights, in particular, the extremely tight feed situation in Bulgaria and Romania.

The rising cost of meat production in Hungary and depressed export prices combined with declines in Romania's socialized hog sector to reduce East European hog numbers by 2.4 percent. The estimated 14-percent decline in Romania's hog numbers was extreme and is based on reported declines in

the socialized sector. Despite optimistic official statements, 2 years of drought and feed import restrictions apparently have severely crippled the mixed feed industry.

Meat production in the region was virtually unchanged last year at 12.2 million tons (table 8). Estimated increases in Poland and Romania offset a 9-percent drop in both Hungarian and Yugoslav output. Pork production in Poland jumped 14 percent to 1.5 million tons, the highest since 1980. East European egg and milk production dropped last year an estimated 2 and 1 percent, respectively.

Costs Rising, Overproduction in Some Countries

Increases in livestock producer prices have generally not kept pace with rising production costs. Foreign exchange constraints for feed imports, lower livestock export unit values, and rising expenses in boosting domestic feed output have placed producers in some countries in a severe profit squeeze. Other countries, ironically, suffer from overproduction.

The cost-price squeeze is most serious in Hungary and Yugoslavia. Adverse weather in Hungary over the past 2 years reduced the availability and quality of domestic feed and falling world meat prices forced an increase in exports to maintain foreign exchange earnings. As a result, profits have fallen, by up to 50 percent, according to some livestock breeders, and are no longer sufficient to finance investment. The problem is most severe in cow raising. Culling rates last year were higher than average, and milk output fell 4 percent, the first decline since 1974.

Despite an average 59-percent increase last year in the guaranteed minimum producer prices for livestock and larger feed supplies, Yugoslavia's high production costs threaten the long term growth of meat output. Last year's increase in guaranteed minimum prices was well below the general inflation rate. By midyear, the market price for liveweight hogs covered only about 60 percent of production costs and slaughter houses were offered more hogs than they could process.

In Czechoslovakia, where per capita meat consumption is already high by the region's

standards, overproduction is a problem. Because little increase is likely in per capita income, no significant growth in consumption is expected. Authorities complain that the level of live animal deliveries is above the meat industry's processing and marketing capabilities. As of January 1985, farms in Czechoslovakia that exceed their targets for feed use or produce meat and eggs over plan will lose production premiums and face a 20-percent cut in prices received for meat and eggs.

Recovery in Poland Continues

Larger feed availabilities, lower free market feed prices, and reinstatement of subsidies and preferential interest rates for breeding stock purchases underpinned another year of livestock expansion in Poland. Except for a drop in cattle numbers, Poland was the only country to register significant across-the-board increases in livestock herds. Nonetheless, herds (except sheep) remain smaller than before the political and economic crisis of the early eighties. Good harvests over the past 3 years and more favorable producer prices will support larger livestock numbers this year.

Market Supplies Unchanged

Market supplies of livestock products were unchanged last year. Per capita meat consumption dropped slightly in Yugoslavia while the GDR and Hungary continued to increase consumption (table 9). Although meat remains rationed in Poland, butter rationing ended in June 1985, and in February 1986, officials allowed limited regional free market meat sales. This measure has not significantly affected meat availability up to now, however.

Livestock product supplies remain the worst in Romania. Despite reported increases in meat production, the estimated decline in 1986 livestock numbers and continued reports of rationing or unavailability of meat indicate severe problems in livestock and at best stable per capita consumption.

Little Change in Meat Exports

Complete data are available only through 1984, when Eastern Europe exported a record 1.2 million tons of meat and meat products.

Imports in the same year fell slightly to an estimated 276,000 tons. Increased Hungarian shipments accounted for most of the rise in exports and the country remained the largest exporter with 42 percent of the region's sales. Poland more than doubled its meat imports in 1984 to maintain meat rations.

Meat exports likely remained the same or declined slightly last year. Hungarian officials report declines in raw meat shipments as well as falling prices. Export prices in mid-1985 were reportedly down 22 and 26 percent for pork and beef, respectively, from mid-1984 following similar declines in 1984. Because of the 1984 price decline, exports reportedly had to be 30 percent larger than in 1980 to reap the same amount of foreign exchange.

Access to Western markets has also become more difficult. Sales to hard currency markets, such as the United States and the European Community, are restricted by the importing countries. The socialist countries, primarily the Soviet Union, as well as the Middle East, are now the main growth areas.

Despite high production costs and declining hard currency receipts per unit of export, Hungary will remain a major meat exporter. There is no other farm product that can replace livestock in terms of the volume of foreign exchange earned. Considerations of foreign exchange rather than domestic cost will continue to govern developments in Hungary's livestock sector.

Exports from Yugoslavia last year were reported up, but the value of live cattle and meat shipments were 5 percent lower than in 1984. Eighty-four percent of last year's exports went to hard currency markets. Polish exports were also up because of higher horse meat and processed pork shipments. A large rise in lamb exports to Arab countries was also reported.

No Growth Expected

No regional livestock growth is forecast this year, despite signs of renewed interest in livestock production. Herd expansion will be discouraged in Czechoslovakia, the GDR, and Hungary. The decline in cattle numbers should continue in Poland, but poultry and hog numbers will be up. Numbers should fall in Bulgaria because of the drought. Any

improvement in the Yugoslav feed price situation may come too late to increase livestock numbers or output in 1986.

Total meat production may fall, depending on the drought's impact on production in the south. Bulgarian and Romanian production could be down the most. However, Poland's output should post another increase and production in the GDR and Czechoslovakia will be at or slightly above current levels. (*Robert Cummings*)

INTERNATIONAL TRADE AND FINANCE

Overall, the East European trade balance deteriorated markedly in 1985 (table 10). Yugoslavia, Bulgaria, and Czechoslovakia experienced a deficit in their merchandise trade, while the other countries, except Romania, realized a much smaller surplus than in 1985. All countries realized a surplus in their hard currency merchandise trade, except Yugoslavia, which nevertheless had a hard currency current account surplus of \$344 million, due to large earnings from invisibles. For all countries, however, the hard currency surplus was less than planned.

The poorer trade balances in 1985 were primarily due to the harsh winter of 1984/85, which caused above-plan energy imports in most countries. Exports were hurt mainly by below-plan industrial production resulting from energy shortages and difficulties in transporting essential inputs. Bulgaria was especially hard hit. In most years its trade has been very nearly in balance; in 1985 it suffered a deficit of around \$1 billion.

For most countries, notably Yugoslavia, the share of intra-CEMA (Council for Mutual Economic Assistance) trade in total trade increased.^{1/} Except for Yugoslavia, most countries likely suffered a deficit in their soft currency trade, indicating trade deficits with the USSR. Still, this balance is improving everywhere except Poland, doubtless a result of increased Soviet pressure. Poland's ruble trade deficit increased from R668 million in 1984 to R684 million in 1985 (1 ruble = \$1.20), and its total ruble debt increased from R5.6 to

1/ All East European countries are members of CEMA except Yugoslavia, which is an associate member, and Albania.

R6.3 billion, according to Polish sources. However, by April 1986, it was reported down to R5.8 billion.

Falling World Oil Prices Have a Negative Impact

Even though the East European countries are importers of oil and gas, the fall in world oil prices has had a largely negative impact on their trade balances and will continue to do so for the next few years. The East European CEMA members, except Romania, import most of their fuel from the Soviet Union and in the past paid less than world prices, since the USSR in 1977 began calculating its oil prices on the basis of a 5-year moving average of world prices. However, with the precipitous fall in world prices, Soviet prices are now above the world level. While world oil prices at the end of first-quarter 1986 were about \$13 a barrel, Czechoslovakia, for example, was paying the equivalent of \$29 a barrel for Soviet oil.^{2/} Hungary was paying \$23-24, but had to pay \$27 for above-plan deliveries, while Poland was paying \$17. Yugoslavia, though less dependent on Soviet oil, is still locked into long term agreements at high prices. Only Romania, which buys much of its oil from OPEC, stands to gain from the situation.

Approximately one-fourth of the hard currency earnings of the East European CEMA members comes from exports of refined petroleum products. The GDR in 1984 earned \$13 million from such exports. Bulgaria, Czechoslovakia, and Hungary also export large amounts. These earnings have, of course, been hurt by the fall in world prices. Hungarian authorities, for example, estimate that in 1985 they lost \$100 million in exports to the West as a result of falling prices. Poland has also suffered because it exports large amounts of coal, for which demand has fallen.

Bulgaria has been particularly hard hit by this situation. In the past, because of its favored status with the Soviet Union, Bulgaria

had been able to buy more USSR oil than it needed and to reexport the surplus at a profit. Since M. Gorbachev assumed the leadership of the USSR, however, Bulgaria no longer receives special treatment, and Soviet oil shipments to Bulgaria have been reduced.

Agricultural Trade Performance Mixed

The region's agricultural trade deficit in 1985 likely exceeded the \$1.8 billion of 1984. However, Poland experienced a remarkable improvement, as its agricultural trade deficit, valued at \$2.4 billion in 1981, narrowed to about \$220 million in 1985. This trade could balance in 1986. Thanks to good grain harvests in recent years, Poland has been able to cut grain imports substantially, and its record rapeseed crops have enabled Poland to increase its exports. Export of horses, sheep, and frozen fruit and vegetables are also reported up.

Other countries, however, have seen a deterioration in their agricultural trade. Bulgaria, traditionally a net exporter of wheat, has had to import large volumes because of 1985's production shortfalls, and its exports of fruits and vegetables were off. Yugoslav agricultural trade has suffered for the same reasons.

Another factor upsetting the agricultural trade balance has been the fall in revenues from livestock product exports. Hungarian meat exports were down in volume in 1985 because of declining production, and the loss in export earnings was exacerbated by the decline in world meat prices. Hungarian authorities estimate that they lost \$120 million in export earnings in 1985. Yugoslav meat exports, while up in volume, also declined in value.

Most Countries See Decline in Debt; Limited New Borrowing

With the notable exception of Poland, the hard currency debt of Eastern Europe is slowly becoming more manageable. Romania has been pursuing, to excess, a policy of paying off its debt as quickly as possible and has managed to reduce its net hard currency debt from \$6.8 billion at the end of 1984 to under \$4 billion in 1985. The cost of this policy has been high, as Romania has cut back severely on imports and

^{2/} Most East European oil accounts with the USSR are settled on a barter basis, whereby the Soviet Union demands given quantities of high quality goods—which might otherwise be sold for hard currency—in exchange for oil.

has aggressively promoted exports at the expense of domestic consumption.

Other countries, with less draconian policies, have managed to accumulate sufficient hard currency to reduce their debt burdens, and on a limited scale, have initiated new borrowing. Czechoslovakia has used its substantial hard currency surpluses—\$800 million in 1984 and \$1 billion in 1985—to reduce its net debt to \$2 billion. Its present financial position is considered secure enough that some government officials are calling for a resumption of limited borrowing to finance investment projects. Bulgaria, always wary of allowing debts to pile up, managed to bring its net debt under \$1 billion in 1984. In 1985, Bulgaria took advantage of its favorable financial situation to initiate new borrowing to finance massive imports needed to make up for production shortfalls. Bulgarian borrowing during 1985 reportedly reached \$475 million.

Hungary, whose hard currency surplus was substantially under plan last year, has been servicing its debt mainly with new borrowing. Its gross debt reportedly rose from \$8 billion in 1984 to \$10 billion, and its net debt is estimated at \$8 billion, up from \$6 billion. Hungarian borrowing reached \$1.6 billion in 1985 and is expected to approach \$1 billion this year. The GDR has accumulated hard currency reserves of \$6 billion and has reduced its net debt to about \$6.9 billion. Western lenders have been almost eager to lend to the country. The GDR borrowed \$3 billion in 1984 and a similar amount in 1985. West German financiers have been particularly important

lenders. It remains unclear just what the East Germans are planning to do with their accumulated reserves.

Poland and Yugoslavia Reschedule Debts

The financial situations in Poland and Yugoslavia remain serious. Poland's net hard currency debt increased in 1985 from \$26.8 billion to \$29.3 billion. Yugoslavia's net debt, about \$15 billion, has declined from a peak of \$17.6 billion in 1983, but repayment continues to place a heavy burden on the economy. Both countries have been involved almost continuously in rescheduling negotiations.

In 1984, Western government creditors began negotiations with Poland on the rescheduling of the 1982–84 arrears, after having broken off all negotiations following the imposition of martial law in 1981. An agreement was signed in July 1985, rescheduling a total of \$11.3 billion. The Poles were granted a grace period until 1991 on repayment of the principal, but were required to pay half the overdue interest from an earlier rescheduling in 1981 by the end of 1985 and the rest in equal installments between December 31, 1986, and December 31, 1989.

Poland, however, failed to pay the \$550 million due in 1985 under this agreement. The Poles were given an extension until March 31, 1986, but its government creditors were unhappy that Poland appeared to be giving higher priority to paying off its commercial creditors. Of the \$2 billion the Poles were initially planning to repay in 1986, \$1.6 billion were to go to commercial creditors.

In March 1986, after Poland agreed to more equitable treatment of its government and commercial creditors, government creditors agreed to reschedule \$2.4 billion due in 1986. This amount includes the missed payment of \$550 million.

In May 1986, a majority of International Monetary Fund (IMF) members approved Poland's application for membership. The admission formalities should be completed by mid summer with World Bank membership reportedly following. IMF membership should help Poland in its rescheduling negotiations with the West. But borrowing from the IMF

Estimated net hard currency debt,
Eastern Europe, yearend, 1981–85

| Country | 1981 | 1982 | 1983 | 1984 | 1985 |
|-----------------|------|------|------|------|------|
| Billion dollars | | | | | |
| Bulgaria | 2.2 | 1.7 | 1.4 | 0.9 | 0.9 |
| Czechoslovakia | 3.4 | 3.3 | 2.7 | 2.5 | 2.0 |
| GDR | 12.3 | 10.7 | 9.1 | 7.7 | 6.9 |
| Hungary | 7.0 | 6.6 | 6.8 | 6.1 | 8.0 |
| Poland | 24.7 | 23.8 | 26.4 | 26.8 | 29.3 |
| Romania | 9.8 | 9.4 | 8.8 | 6.8 | 3.8 |
| Yugoslavia | 16.3 | 16.8 | 17.6 | 17.0 | 15.0 |
| Total | 75.7 | 72.3 | 72.8 | 67.8 | 64.9 |

Sources: Data for 1981–83 are from the article: "Eastern Europe Faces Up to the Debt Crisis," Joint Economic Committee, *East European Economies: Slow Growth in the 1980's*, vol. 2, 1986. Data for 1984 and 1985 are from various Government agencies.

itself will depend on Poland's efforts towards economic adjustment.

Yugoslavia had been seeking a multiyear refinancing of the debt repayments due between January 1985 and December 1988. In December 1985, such an agreement was reached with its commercial creditors, covering \$3.8 billion falling due in that 4-year period. Repayment will be spread over 11-1/2 years, with a 5-year grace period.

In April 1986, the Yugoslavs finally reached a multiyear rescheduling agreement with their government creditors as well. Under this agreement, 85 percent of the principal falling due between May 1986 and April 1988 will be rescheduled for 9 years with a grace period of 4 years. Negotiations had snagged on a disagreement between Yugoslavia and the IMF over domestic interest rates. The IMF had been pressuring the Yugoslav Government to raise interest rates to a level equal to inflation, or to about 80 percent. The Yugoslavs instead froze their interest rates at 61 percent, arguing that to raise them any higher would place undue hardship on businesses already suffering staggering losses. In a final compromise, the Yugoslav Government agreed to raise interest rates to 68 percent and in return would not make use of the next standby arrangement.

Little Improvement Expected in Trade Balance

All the East European countries have ambitious plans for improving their trade balances in 1986. However, first-quarter results for most of the countries have been disappointing. The 1985/86 winter was again harsh. Most countries have reported a continuing rise in energy imports and below-plan export earnings. In January-February 1986, Hungary's hard currency imports were up 23 percent from a year earlier, while export earnings rose 6 percent. At that rate, Hungary could see a deficit in its 1986 trade. Bulgaria and Romania are continuing to suffer severe energy shortages; Czechoslovakia, the GDR, and Poland have all suffered transportation disruptions. These conditions will likely hurt industrial production throughout the region. That, combined with falling revenues from petrochemical exports and lost food exports from the temporary Chernobyl-related import

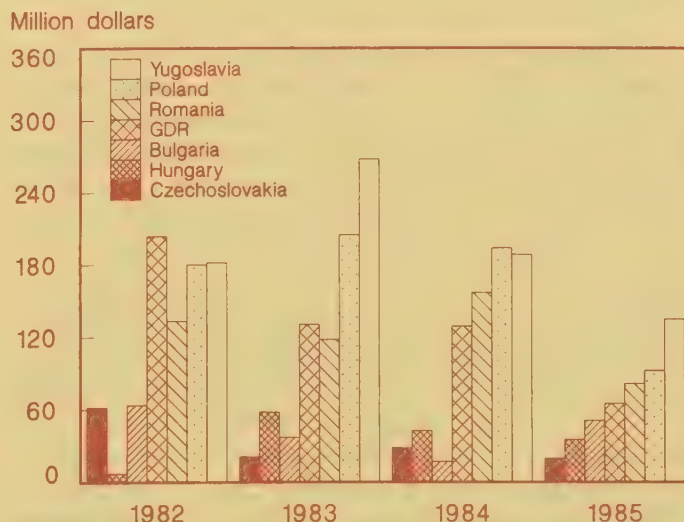
ban by the EC, will mean lower export earnings in the first half of 1986. This situation can be turned around in the second half only with great effort. *(Nancy Cochrane)*

AGRICULTURAL TRADE WITH THE UNITED STATES

U.S. agricultural exports to Eastern Europe in calendar 1985 fell 37 percent to \$479 million, the lowest since 1972 (table 11). Exports declined precipitously to all countries except Bulgaria; exports to the GDR, Poland, and Romania fell by half. Soybean exports posted the largest decline, but values decreased for all commodities. Because of falling prices, export value declined more than volume. The reasons for the drastic drop include falling demand due to increased domestic production, shortfalls in hard currency earnings, and U.S. prices, which, even though they declined considerably, remained above the world average. The situation may improve some in 1986, thanks to a continuing fall in prices, the decline in the dollar value, and poor 1985 harvests in the southern countries.

Agricultural imports from Eastern Europe came to \$263 million, almost the same as 1984. The United States had a deficit in agricultural trade with Poland and Hungary and a surplus with the other countries, but the overall agricultural trade surplus with Eastern Europe fell by half. As in previous years, primary agricultural products imported from

Direct U.S. Exports to Eastern Europe^a



Eastern Europe were processed meat, valued at \$159 million, tobacco, and wine (table 12).

The value of total U.S. exports to Eastern Europe actually increased slightly in 1985, reaching \$1.4 billion. Total imports from Eastern Europe reached \$2.1 billion. For the second year, the United States ran a deficit in total trade with the region.

Grain, Oilseed Exports Down Sharply

Total U.S. grain exports to Eastern Europe came to \$113 million, down 29 percent from 1984 (table 13). Wheat exports fell from \$19 million to \$12 million, and once again they all went to Poland. While corn exports rose 3 percent in volume, U.S. corn prices fell so sharply that the value of corn exports declined by 17 percent.

As in previous years, the largest customer for U.S. corn was the GDR. However, corn exports to the GDR fell 25 percent in volume, following a drop of almost 21 percent in 1984. Sales to the GDR have been hurt by record domestic harvests, as well as competition from other suppliers, notably Canada. However, the fall in exports to the GDR was more than offset for by increased sales to Bulgaria. Because of Bulgaria's disastrous 1985 grain harvest, its agricultural imports from the United States rose from \$17 million in 1984 to \$51 million in 1985, and its share of U.S. agricultural exports to Eastern Europe rose from 2 percent to 11 percent. Corn exports to Bulgaria in 1985 totaled 210,000 tons. The large shipments continued into 1986; in January-April 194,000 tons went to Bulgaria.

The most dramatic decline was in U.S. soybean exports to Eastern Europe. Soybean exports fell 53 percent in volume and 65 percent in value. Yugoslav purchases from the United States fell from 302,000 tons to 235,000, but were still above those of 1982 and 1983. Although Yugoslavia bought small amounts of soybeans from other suppliers, the United States remained the primary supplier. Soybean exports to Romania, on the other hand, plummeted from 369,000 tons in 1984 to 98,000. Total soybean imports by Romania fell sharply in 1985, due to unexpected hard currency shortfalls. Furthermore, Romania probably bought at least a third of its soybeans from Latin American suppliers.

Exports of soybean meal dropped 23 percent in volume and 33 percent in value from 1984, following a 46-percent drop in volume in 1984. Once again, the United States faced stiff competition from other suppliers. The U.S. share of East European oilmeal imports fell from an already low 10 percent to about 8 percent.

Exports of animal products, primarily hides and skins and dairy products, also fell, by 34 percent. The world market for hides has been very slack, and U.S. exports have suffered accordingly. U.S. exports of dairy products have mostly been in the form of food aid to Poland, and such aid fell off sharply in 1985.

Lint cotton exports totaled 29,000 tons, valued at \$48 million, a 45-percent rise in volume over 1984, but about the same as 1983. Most were financed by Commodity Credit Corporation (CCC) export credits.

Use of CCC Credits Down, Food Aid to Poland Tapers Off

CCC guaranteed credit has become less effective than in previous years in promoting U.S. exports to Eastern Europe. Fiscal 1985 allocations totaled \$31 million to Hungary and \$170 million to Yugoslavia. Hungary used only \$21.8 million of its allocation, \$21 million of this for soybean meal imports, although its total soymeal imports from the United States came to \$33 million. While Hungary imported \$5 million worth of cotton, it did not use any of the credit available to it. Yugoslavia did not use any of the credit for soybeans or meal, and used only \$30 million of the \$60 million available for cotton, and \$10 million of the \$50 million allocated for hides and skins.

CCC credit allocations for fiscal 1986 total \$22 million for Hungary, including \$13.5 million for soymeal and \$5 million for cotton, and just \$110 million for Yugoslavia, including \$10 million for soymeal, \$60 million for cotton, and \$40 million for hides. Hungarian officials do not plan to use the credit for cotton because they consider U.S. prices to be too high. Yugoslavia may use the \$10 million available for meal, but sales of hides are proceeding very slowly and are not expected to reach \$40 million. While Yugoslav fiscal 1986 imports of U.S. cotton are likely to be close to the previous year's, much of that will

be the result of an extension of the shipment deadline for fiscal 1985's imports to December 31, 1985. The Yugoslavs are increasingly reluctant to take on new credit, since the continuing devaluation of the dinar makes calculating repayment costs difficult. Moreover, recent Yugoslav legislation places stringent limits on foreign borrowing.

Food aid provided by the United States to the Polish people has fallen off sharply, as local supplies have improved. In past years, aid was provided under Title II of P.L. 480 and Section 416 of the Overseas Dairy Donation Program. Fiscal 1985 aid provided under section 416 was valued at \$46 million, down slightly from \$49 million in fiscal 1984. Aid sent under Title II came to \$11 million, down from \$22 million in fiscal 1984. Title II shipments included milled rice, vegetable oil, and wheat flour.

The United States Government provided additional assistance to the Polish people as a result of the Chernobyl accident. As of early June, a Section 416 donation to the Polish people of approximately 2,100 tons of dairy goods had been approved for fiscal 1986. Almost 1,200 tons of this is non fat dry milk; the remainder is cheese, butter, and butter oil.

Little Change Expected in 1986

U.S. agricultural exports to Eastern Europe will most likely remain low. Estimates are made on a fiscal year basis, and fiscal 1986 exports are forecast at \$540 million, up from \$531 million in fiscal 1985. Exports are expected to rise in volume because of the more modest 1985 production, and because of falling U.S. prices, combined with the decline in the dollar's value. However, for these same reasons, the value of U.S. exports will likely not increase as much.

Because of severe production shortfalls suffered by the two primary importers of U.S. soybeans, Yugoslavia and Romania, U.S. soybean exports should rise some in 1986 from the 1985 level, but will continue below previous years. U.S. sales to Romania during January–April 1986 were ahead of the same period last year, but will probably not reach the high levels of 1983 and 1984. Because of continuing emphasis on paying off its foreign debt, Romanian imports are expected to fall short of needs. Romania also has begun to

turn to other suppliers who can offer countertrade arrangements. Despite the new quotas placed on soybean imports, Yugoslavia is expected to remain a strong market for U.S. soybeans this year. Even after the implementation of the new foreign trade legislation, Yugoslavia has been responding to low production with increased imports from the United States.

U.S. corn exports may rise slightly. Bulgaria has continued buying large amounts of corn since the beginning of the year. Romania, which had not bought U.S. corn since 1982, also has been importing U.S. corn. Corn exports to other countries will likely be unchanged.

U.S. exports of other commodities probably will change little. In the short term, the U.S. share of East European oilmeal imports will remain low, though in the long term, this share may rise as the financial situations in the region improve and Latin American competitors reach the limit of their capacity. Exports of cotton and animal products will likely remain about the same. *(Nancy Cochrane)*

OUTLOOK

Agricultural output should be higher in 1986 than in 1985 because of recovery in the drought-affected southern countries. These countries plan the largest increases in output while those in the north plan more modest growth. Overall economic performance should also be higher. Unlike early 1985, there were no widespread economic dislocations caused by the 1985/86 winter as there were in 1984/85. However, growth continues to be restrained by inadequate foreign exchange for imports, slow progress on economic reforms, an irrational price structure, and particularly severe disequilibrium in the Romanian, and to a lesser extent, Polish economies.

Agricultural investment is planned to rise again this year. Hungarian officials plan a large increase, especially in support of agricultural research. Despite higher investment, supplies of fertilizers and plant protection agents regionwide will remain inadequate. Higher prices in several countries will further restrict applications.

Irrigation and drainage will receive increased resources in the southern countries because of the previous 2 years of drought. The Romanian Government, for example, has made progress in this area the major task of all farm investment in the 1986-90 Five Year Plan. Hungarian officials will continue for another year subsidies for farms that improve irrigation facilities.

No Change in Grain Output Expected

Regional grain production this year will be close to that of 1985, between 105 and 110 million tons. The 1985/86 winter was less severe than the previous one, and snow cover, at least in the northern countries, was adequate to insure good winter crop yields. Grain production should also be more even across countries. Production in the northern countries will likely continue in the same range, while output in the south will be up, assuming a return to more normal weather.

There remain problems in the south nonetheless. Dry weather in Bulgaria delayed emergence of 1985 fall-sown crops and similar conditions delayed fall sowing in Yugoslavia. This delay, along with unfavorable producer prices, left Yugoslavia with the smallest winter wheat area in the past 5 years--1.3 million hectares. Regional harvested wheat area should be similar to last year's, however, because of expanded area in Hungary and Poland.

Oilseed Outlook Mixed

Soybean and sunflowerseed production should both rise in 1986, but rapeseed output will likely be down. Production of soybeans and sunflowerseed in Romania is forecast above the dismal level of 1985. Yugoslav efforts to increase domestic supplies of oilseed meal and vegetable oil have resulted in very favorable producer prices for soybeans and sunflowerseed relative to other crops, so sown area and production should be up. Lower rapeseed area in Poland and higher-than-average winterkill in Yugoslavia account for the expected decline in regional rapeseed output.

Possible Change in Livestock Policy

This year may signal a change in policy toward more balanced treatment of the crop

and livestock sectors. The recent string of generally good harvests has improved feed supplies. There are also political pressures in Poland to regain past meat consumption levels, and the low profitability of livestock operations in Hungary and Yugoslavia mean that livestock production there will receive more support than in the last 4 to 5 years.

Despite the more positive attitude towards livestock, little growth is expected this year. Except in Poland, expansion of livestock herds will be discouraged in the northern countries, and any production increases should come from more efficient husbandry. Hog and poultry numbers will continue to expand in Poland, while Bulgarian and Romanian officials will act to counter any herd drawdowns because of the drought.

Regionwide meat production will remain unchanged or drop slightly. Output in the southern countries should decline, but expanding production in Poland will offset some of the decline.

Deterioration Expected in Foreign Trade

The region's foreign trade performance in 1986 could be the most disappointing of all the major economic sectors. Ambitious plans for trade balance improvements in several countries are running up against a more rapid increase in energy and other hard currency imports than planned for the first half of 1986.

Efforts to improve agricultural trade balances will suffer setbacks everywhere except in the northern countries. Further deterioration is likely in the agricultural trade balances of Bulgaria, Romania, and possibly Yugoslavia.

Grain imports are forecast to increase in 1985/86 following the return to a more average harvest in 1985. Purchases could reach 8.4-8.9 million tons, while exports will decline, perhaps to between 4.2 and 4.7 million tons. The rise in net imports will occur in the southern countries, particularly in Bulgaria, where imports could be a record, approaching 2 million tons. Romanian imports will also be up, perhaps topping 1 million tons. Imports by the region could decline, however, in 1986/87 to about 6.5 million tons if more average

country-by-country output is achieved this year.

Oilseed and oilseed meal imports may rise slightly in 1986, but oilseed meal consumption should change little. Foreign exchange constraints will likely hold Romanian oilseed imports below those necessary to compensate for the 1985 crop shortfall. Meal consumption in Yugoslavia will fall this year because of declining demand from the livestock sector. Only Poland is likely to see an increase in meal consumption.

Despite claims of low profitability for livestock raising, livestock and livestock product exports from Hungary and Yugoslavia will continue close to levels of the last several years. Foreign exchange earnings from livestock and livestock product exports rather than domestic production costs remain the determining factor in Eastern Europe's presence on the world market.

U.S. Farm Exports To Rise

U.S. agricultural exports to Eastern Europe will rise slightly in fiscal 1986, to an estimated \$540 million from \$531 million in fiscal 1985. Shipments of several major commodities will rise in volume, but weak prices will not permit a corresponding increase in value. Soybean and coarse grain exports will gain, but wheat and soybean meal shipments will be off.

Coarse grain exports are forecast close to 1 million tons, up from 806,000 in fiscal 1985, because of increased sales to Bulgaria and Romania. The United States, along with European suppliers--particularly EC barley shippers--are benefiting from drought-induced imports by these countries. The record wheat harvest last year in Poland means a further decline in U.S. wheat exports in fiscal 1986. Market improvement in the region may occur in 1987, depending in large part on the stipulations of any renewed bilateral Canadian-GDR grain agreement.

Because of severe production shortfalls in Romania and Yugoslavia, the two primary importers of U.S. soybeans, imports from the United States will be up in 1986. Fiscal 1986

soybean exports are estimated at 610,000 tons, up from fiscal 1985's 382,000. The potential for increased sales to the region is great, but competition from Latin America and the Romanian preference to maximize countertrade deals will constrain U.S. sales.

U.S. exports of soybean cake and meal should be off, however. Fiscal 1986 exports through April to the major customers--Hungary, Poland, and Yugoslavia--were down from year-earlier levels. Reduced livestock inventories in Hungary and Yugoslavia account for the decline, while Poland's record rapeseed crop last year will depress purchases. It's unlikely that the \$132 million in fiscal 1986 CCC export credits allocated for Eastern Europe will be fully used. Hungary's total credit allocation is \$22 million; it should use its credit line of \$13.5 million for soymeal, but is not planning to use a \$5-million allocation for cotton. The larger allocation to Yugoslavia--\$110 million--may be less than half used. To date, fiscal 1986 exports to Yugoslavia of cattle hides (\$40 million in credit guarantees), cotton (\$60 million in guarantees) and soybean meal (\$10 million) are all below year-earlier levels.

Extent of Chernobyl Accident Losses Uncertain

The impact of the Chernobyl nuclear power station accident in late April on Eastern Europe's agriculture remains uncertain. Most immediately, food supplies were upset in several countries by government warnings against consumption of fresh milk from grass-fed cows and of fresh vegetables. However, at the time of the accident, Eastern Europe was several months away from the major harvest period, so crop damage may be limited to supplies of green feed for grazing livestock. The region's food exports, particularly of processed meat, have suffered, most directly from the EC ban on most food imports from the region (minus the GDR) that was in effect during the last half of May. A special article that follows treats Chernobyl's impact on Eastern Europe's agriculture in more detail. (*Robert Cummings*)

EFFECTS OF THE CHERNOBYL ACCIDENT ON EASTERN EUROPE

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Abstract: On April 26, a serious accident occurred at the Chernobyl nuclear power plant in the Soviet Ukraine. The subsequent airborne radioactive contamination spread over sections of Eastern and Western Europe plus parts of North America. Within days, all East European countries announced measures to prevent consumption of potentially contaminated foods, primarily fresh vegetables and milk from grass-fed cows. The European Community imposed a ban on food imports from the Soviet Union and most East European countries from May 12 to May 31, followed by announcement of new standards for radioactive levels in food imports from all sources. The extent of the accident's effect on Eastern Europe's agriculture remains unclear, but the region's agricultural exports have suffered.

Keywords: Chernobyl, Eastern Europe, European Community, radioactivity, nuclear power, agricultural exports, import ban.

It is still unclear to what extent the April 26 accident at the Chernobyl nuclear power plant affected East European agriculture. Effects on the region's agricultural trade, however, are already evident. Chernobyl, in the Ukraine, USSR, lies about 280 miles east of the Polish border, and 250 miles northeast of the Romanian border. The accident caused the explosion of one of the four 1000-megawatt reactors, radioactive contamination in the immediate vicinity of the plant, and a radioactive cloud over most of Eastern Europe, Scandinavia, and a part of Western Europe. The principal elements of the contamination reportedly were short-lasting iodine-131 and barium-140 isotopes that dissipate in a matter of days and long-lasting cesium-135 and strontium-90 isotopes that remain radioactive for decades.

The area worst affected in Eastern Europe appears to be northeastern Poland, which contains about a quarter of the country's population and about the same proportion of agricultural production. The concentration of radioactive contaminants in that part of the country was reported as significant but still below the danger point, except apparently for the iodine-131 concentration in fresh milk. Romania and Hungary have also been identified as possible problem areas. Other countries outside of the Soviet Union and Eastern Europe, eventually

added to the list, were Sweden, Norway, Finland, Denmark, Austria, and the Federal Republic of Germany.

Poland was first to take preventive measures as of April 29, including: repeated warnings against drinking fresh milk from grass-fed cows, a ban on pasturing dairy cows in the northeastern part of the country, and oral administration of thyroid-protective doses of potassium iodine to children under 16 and pregnant women. These and similar measures—urging the people to wash all fresh vegetables thoroughly before consumption, not to drink surface water, to keep children inside as much as possible—were gradually introduced in other East European and some West European countries.

By the end of the third week after the accident, the emergency was practically over, with the radiation leak at the Chernobyl plant contained and the radiation over the affected areas outside the Soviet Union dissipated below any significant point. Poland officially declared the end of the emergency on May 15 and this move was supported by specialists from the International Atomic Energy Administration and the World Health Organization.

While the accident's impact on East European agricultural production is uncertain,

Eastern Europe: Selected agricultural exports to the European Community
and EC share of total exports of these commodities, 1984

| Commodity | Bulgaria | Czechoslovakia | GDR | Hungary | Poland | Romania | Yugoslavia | Eastern Europe |
|--------------------|----------|----------------|-------|---------|--------|---------|------------|----------------|
| Million dollars | | | | | | | | |
| Meat: fresh, froz. | 7.6 | 57.0 | 2.0 | 168.0 | 74.8 | 26.4 | 62.6 | 398.4 |
| Share (percent) | 6.5 | 59.1 | 3.7 | 34.7 | 89.6 | 13.5 | 2.7 | 33.8 |
| Live cattle | 0.4 | 8.0 | 0.0 | 6.0 | 27.0 | 0.6 | 36.0 | 78.0 |
| Share (percent) | 3.6 | 84.2 | 0.0 | 6.5 | 54.9 | 4.3 | 62.1 | 27.3 |
| Live horses | 0.0 | 0.8 | 0.9 | 3.6 | 53.3 | 0.8 | 26.1 | 85.5 |
| Share (percent) | 0.0 | NA | 100.0 | 94.7 | 92.7 | 100.0 | 87.9 | 92.2 |
| Live poultry | 0.6 | 0.0 | 0.0 | 1.6 | 0.0 | 0.1 | 0.6 | 2.9 |
| Share (percent) | 100.0 | 0.0 | 0.0 | 16.0 | 0.0 | 100.0 | 8.6 | 16.4 |
| Hogs | 0.0 | 0.2 | 10.7 | 3.8 | 0.0 | 0.0 | 0.0 | 4.7 |
| Share (percent) | 0.0 | 4.4 | 38.2 | 8.7 | 0.0 | 0.0 | 0.0 | 19.3 |
| Sheep and Goats | 9.9 | 0.0 | 0.2 | 33.6 | 15.9 | 1.7 | 0.8 | 62.1 |
| Share (percent) | 15.5 | 0.0 | 2.4 | 65.8 | 104.6 | 3.1 | 36.4 | 30.5 |
| Milk and cream | 0.0 | 12.1 | 0.0 | 0.0 | 4.0 | 0.0 | 0.2 | 16.3 |
| Share (percent) | 0.0 | 30.9 | 0.0 | 0.0 | 12.8 | 0.0 | 28.6 | 20.6 |
| Fish: fresh, froz. | 1.2 | 0.0 | 1.1 | 2.0 | 8.6 | 0.4 | 2.1 | 15.4 |
| Share (percent) | 31.6 | 0.0 | 36.7 | 100.0 | NA | 36.4 | 80.8 | NA |
| Shellfish, fresh | 0.8 | 0.8 | 2.0 | 1.7 | 19.9 | 0.5 | 6.1 | 31.8 |
| Share (percent) | 20.5 | NA | 35.7 | 100.0 | NA | 83.3 | 95.3 | NA |
| Fresh vegetables | 6.5 | 45.5 | 1.8 | 25.0 | 19.7 | 11.1 | 46.1 | 155.7 |
| Share (percent) | 44.2 | (25.0) | 94.7 | 60.5 | 39.6 | 47.4 | 75.6 | 81.1 |
| Fresh fruit | 2.0 | 4.0 | 0.7 | 9.0 | 7.6 | 6.5 | 5.3 | 35.1 |
| Share (percent) | 28.6 | 100.0 | 100.0 | 23.0 | 22.0 | 68.4 | 42.1 | 32.6 |
| Total | 29.0 | 128.4 | 19.4 | 254.3 | 230.8 | 48.1 | 185.9 | 895.9 |

NA = Not available. () = Estimate.

Sources: FAO Trade Yearbook, U.N. data.

it has affected its agricultural trade, particularly of fresh and processed foods. Early in the emergency the Scandinavian countries imposed a radiation level check on all fresh food imports from Eastern Europe and on imports of food that were processed after April 25, and on May 1, West Germany banned imports of all fresh food from the Soviet Union and Poland. The ban was subsequently adopted by other West European countries, as well as Australia, and extended to all East European countries, except the German Democratic Republic (GDR). Thus, starting in the second week in May, trucks bringing fresh produce from East European countries to Western Europe began to be screened for radiation, and many were turned back.

On May 12, after deliberating for a week, the European Community (EC), superseding individual country restrictions, imposed a ban on farm product imports from Bulgaria, Czechoslovakia, Hungary, Poland, Romania, Yugoslavia, and the Soviet Union. The GDR was not included because its trade with West Germany is considered an internal German matter. The ban affected imports of fruit, vegetables, milk, fresh meat, game, all live animals, and freshwater fish. The ban was replaced on May 31 by new standards of radioactivity to be applied against food imports from all sources.

The U.S. reaction was for the Food and Drug Administration (FDA) and USDA's Food Safety and Inspection Service (FSIS) to review

standards for radioactive contamination of foods and to communicate these standards to European countries that export food to the United States. East European governments were asked to provide detailed radiation readings to the United States and most countries complied. U.S. specialists were also sent to selected countries to measure radiation on the spot. The FDA introduced a precautionary testing of food imports and FSIS requires that meat exported to the United States from the affected countries be accompanied by a health certificate issued by the exporting country. The program has not encountered a contamination problem.

The EC ban could have a serious impact on the region's hard currency earnings, particularly as the refusal to buy East European goods reportedly extended in practice to some manufacturers. Also preconceptions may be much more difficult to dissipate than radioactive clouds. In any case, the region's ability to service its foreign debts and to keep its industries and exports competitive has been impaired.

Potential losses may be difficult to quantify. In 1984, of total East European exports of \$98.0 billion, agricultural exports amounted to \$6.7 billion or 6.8 percent. In the same year, exports of the banned categories to EC countries amounted to \$896 million, or 13.4 percent of all East European agricultural exports.

In addition, the EC ban on food imports from Eastern Europe likely made marketing these products very difficult in alternative markets because of mounting food surpluses in Europe and North America and competition from Third World nations.

Any food surpluses in Eastern Europe could find a market in the Soviet Union. Such trade, however, while reducing the region's debts with the Soviet Union, will also reduce the region's hard currency earnings that are badly needed to continue servicing its hard currency debts and to import spare parts, machinery, and raw materials from the West.

FOREIGN TRADE DECISIONMAKING IN EASTERN EUROPE: RESPONSES TO ECONOMIC STRINGENCIES

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Abstract: In response to the worsening debt crisis of the early eighties and the increasing need to raise exports, all seven countries of Eastern Europe have begun to reform their foreign trade systems. To varying extents, the network of monopoly state-run foreign trade organizations (FTO's), typical of all centrally planned economies, has been modified to allow a greater role for production enterprises in decisionmaking and to strengthen the link between world markets and domestic production decisions. The extent of the reform varies throughout the region and effects to date have been limited.

Keywords: Foreign trade, Eastern Europe, foreign trade organization, centrally planned economy, reforms, New Economic Mechanism, Foreign Exchange Act, Yugoslavia.

Prior to the mid-seventies, virtually all foreign trade in a centrally planned economy (CPE) was carried out by a small number of monopoly foreign trade organizations (FTO's). In most cases these FTO's were directly subordinated to the foreign trade ministries and had little contact with end-user or production enterprises. When serious foreign exchange shortages and debt crises hit Eastern Europe in the early eighties, governments began to seek ways to stimulate exports while constraining imports. The need to provide greater incentives to enterprises to produce for export led to a number of measures to reform the foreign trade system, thereby increasing the decisionmaking powers of production enterprises and allowing a limited role for market forces. The extent of such reforms varies considerably from one country to another, and to date none of the East European countries has completely opened up its foreign trade to world market forces.

Traditional CPE Foreign Trade Apparatus

Until recently, all foreign trade in CPE's (except Yugoslavia, which is better described as a quasi-market economy) was carried out by a system of state FTO's operating on commission on behalf of production enterprises and end-users, but directly subordinated to the country's foreign trade ministry. A single FTO would have monopoly control over all trade in a given commodity or commodity group. For example, there would be one FTO for livestock products, another for

grain and oilseed products, and yet another for fruit and vegetables.

In the planning process, specific production plans could be formulated at the enterprise level, but these were then sent up through the system to the party presidium for coordination and approval. Enterprises would register resource needs and submit these to the appropriate industrial ministry, which would evaluate them in terms of goals set by the Party. The Ministry could then request imports to make up for shortfalls in needed inputs. These requests would be evaluated by the ministries for foreign trade and finance in terms of foreign exchange availability and overall plans. Once import needs were set, the FTO would be instructed to procure the commodities. This process tended to isolate the FTO from the enterprise on whose behalf it was supposed to be working. 1/

Usually, all foreign exchange earnings from exports had to be turned over to a central bank, in exchange for domestic currency. The exchange rates used in those transactions tended to be wholly artificial:

1/ For further discussion of this process, see A. Bunker, J. Jones, D. Conley, "Doing Business with CPE's and Marketing Strategies for Western Exporters"; in James R. Jones, ed.; *East-West Agricultural Trade*; Westview Press, Inc.; Boulder and London; 1986.

rates would typically differ for imports and exports and would likewise vary by commodity. In this way, potentially unprofitable transactions--where production costs might exceed the earnings from the export of the final product--could be made to appear profitable, and inefficient enterprises could be kept afloat.

Debt Crisis of Early Eighties Leads to Limited Reforms

In the late seventies and early eighties, when foreign debts began to pile up and Western banks became increasingly reluctant to provide new lending, all the countries of Eastern Europe felt the need to increase hard currency earnings to service their huge debts. Yet, the highly centralized foreign trade system provided little incentive to enterprises to produce for export, much less to provide the quality demanded by hard currency customers. The result was a series of reforms, implemented to varying extents throughout the region, aimed at increasing the links between FTO's and production enterprises and giving the enterprises a greater role in the decisionmaking.

Typical reforms included the dual subordination of FTO's to the foreign trade ministry and the relevant industrial ministry and sometimes the attachment of the FTO to a production enterprise, the introduction of export profitability as a plan indicator on the enterprise level, the imposition of a uniform exchange rate, and attempts to align domestic producer prices with world prices. Such reforms have gone the farthest in Hungary; at the other extreme, Romania has done little more than pay lip service to such reforms.

As part of its New Economic Mechanism (NEM), Bulgaria introduced a number of measures to provide closer links between the FTO's and production enterprises and make production enterprises more responsive to international markets. Enterprises are given targets for foreign exchange earnings and are allowed to retain a certain percentage of above-plan foreign exchange earnings. FTO's were placed on a self-financing basis and are now liable for any losses they incur. The FTO's are still subordinated to the Ministry of Foreign Trade, but they are required to sign contracts with the production enterprises. Officials say that cooperation is now very

close between the enterprises and the corresponding FTO. For example, the livestock complex *Rodopa* is closely tied to the FTO *Rodopaimpeks*, and *Bulgarplod* (the major producer of fruits and vegetables) to *Bulgarplodeksport*. Production enterprises do not have to trade through an FTO, but can set up their own foreign trade sections if they wish. This, however, is done to a much lesser extent.

The GDR has introduced similar reforms. In 1980, the GDR began the vertical integration of its production enterprises into conglomerates known as *combines*. At that time 24 combine-owned FTO's were set up. Most of the remaining FTO's were detached from the Ministry of Foreign Trade and were subordinated to the relevant industrial ministries. Some of these FTO's were broken up into a number of foreign trade sections, which were then assigned to different combines as dependent firms. The directors of these sections became members of the combine management, so that they were dually subordinated to the combine and the general director of the FTO. A few FTO's remain under the Ministry of Foreign Trade, and a few combines have been given the right to carry out foreign trade directly without using an FTO. Combines are given such rights only if they have no attached foreign trade section. While in most cases, foreign exchange earnings must be turned over to the central bank, a few combines are allowed to set up their own foreign exchange accounts, if they realize an increase in exports over the previous year or exceed their export targets.

Poland and Czechoslovakia have made moves in similar directions, but to a much more limited extent. Poland authorizes some enterprises to carry out independent foreign trade. There are now slightly over 100 such enterprises, and authorization is given only if exports reach 25 percent of the value of production. Most imports are still centrally purchased by FTO's under the Ministry of Foreign Trade and then administered to production enterprises. The Ministry of Foreign Trade has strict control over hard currency allocations to enterprises for imports, which are linked to their exports.

Czechoslovakia is experimenting with different types of foreign trade organizations.

A select few FTO's have been integrated into associations of production enterprises, but remain subordinated to the Ministry of Foreign Trade. In other cases, economic linkage between an FTO and a production unit has been established without the organizational transfer of the FTO. In these cases, relations between the FTO and the enterprise are regulated by contract. However, most Czechoslovak trade continues to be carried out by the traditional system of monopoly FTO's.

During the 1970's, many of the FTO's in Romania were transferred out from under the Ministry of Foreign Trade and attached to the appropriate industrial ministries. All import/export deals still had to be submitted to the Ministry of Foreign Trade for approval, but end-users were to be allowed a greater role. With Romania's New Economic Mechanism, introduced in 1979, FTO's were made self-financing and self-managing and were to engage in contractual relations with the production enterprises. In 1981, a single exchange rate was introduced, but in special cases different exchange rates may be approved. Production units are allowed to keep a portion of above-plan foreign exchange earnings, but, as in most CPE's, these funds may only be used for imports used in the production of exports or for the introduction of new technology.

Reforms Promote Exports, But Enterprise Autonomy Remains Minimal

In evaluating the effectiveness of these reforms, it is important to stress that the primary goal of these measures was to promote exports. The East European countries place highest priority on conserving foreign exchange and reducing their foreign debt. Thus, while increasing incentives for enterprises to produce for export, governments have retained tight control over imports. Import rights must be granted by the foreign trade ministries and are approved on the basis of foreign exchange availability and national priorities. Even export activities are still rigidly circumscribed by foreign trade plans drafted by the central government. Enterprises are required to meet export goals imposed from above. These targets typically include export volume, export profitability, and foreign exchange revenues from

nonsocialized countries; the last target may even be broken down by key countries.

The continuation of rigid state control over foreign trade activities is particularly characteristic of Romania. Despite lip service given to its NEM, the Romanian Government in fact allows virtually no role for the production enterprises in foreign trade decisions. Officials of *Agroeksport*, responsible for trade in grains and oilseeds and still under the Ministry of Foreign Trade, when interviewed by the author, indicated that all orders for import or export came from the Ministry. They had access to large amounts of information on world market conditions, but were often unable to act on that information because they had to wait for the go ahead from the Ministry. The officials had virtually no contact with end-users and had no great interest in their needs.

In most of the East European CPE's, export profitability has been introduced as a plan indicator for production enterprises. Yet, true profitability remains difficult to measure, in that none of these countries has been successful in bringing its domestic producer prices in line with world prices (Hungary has come the closest). In many cases, the revenues generated from exports do not cover the costs of inputs. Exchange rates are set to insure profitability. As of 1984, Poland had still not introduced a single exchange rate. Adjustments were still being made in the exchange rate for certain imported inputs 2/, and exporters were sometimes allowed a higher exchange rate to insure profitability. 3/ Such policies may enhance foreign exchange earnings, but do not promote internal economic efficiency.

Major Reforms in Hungarian Foreign Trade System

Hungary has gone the farthest in giving end-users a role in foreign trade decisionmaking. FTO's no longer have a

2/ Ursula Plowiec, "The functioning of Poland's Foreign Trade: Experience and Prospects", mimeograph, Foreign Trade Research Institute, Warsaw, June, 1984.

3/ Jacek Rostowski, "The Reformed Economic System in Poland, 1983-84", RFE-RL, *RAD Background Report*/174, September 17, 1984.

monopoly in the trade of a given commodity. Production enterprises are allowed to choose among the existing FTO's and may deal with more than one. Alternatively, the enterprise may apply for its own foreign trade rights. As in other countries, these rights are contingent on national priorities and foreign exchange availability. However, the process of obtaining import rights is more streamlined than in the other CPE's. Over 250 enterprises now have such rights. Export profitability has been introduced as a plan indicator, and firms are actively encouraged to export.

But, even Hungary has not fully opened up its foreign trade to market forces. While Hungary's goal has been to align domestic prices totally with world prices and achieve complete convertibility of the forint, this has not been accomplished. One reason is that officials appear to be afraid that to do this too rapidly would expose the population to undue hardship. Given Hungary's debt problems, it is not surprising that imports are strictly controlled, but enterprises' export activities are also restricted in some ways. Export agreements with the other members of the Council for Mutual Economic Assistance (CEMA) receive first priority, and enterprises are required to produce the goods specified in these agreements even if that is not the most profitable line of production. Moreover, enterprises producing similar goods for export to the same markets are discouraged from competition, which is considered detrimental to the national interest. Finally, despite the fact that at least 270 production enterprises have foreign trade rights, some three dozen FTO's still carry out nearly 80 percent of the foreign trade. There has been talk that there are too many firms with such rights, that the management of these firms seek these rights not in the interest of efficiency, but "to keep a finger on travel assignments." 4/

Yugoslavia Strengthens Control Over Foreign Trade

Yugoslavia differs significantly from other Eastern European countries, first, in that it is not a full member of CEMA; second, in that its system of worker self-management

allows considerably more enterprise autonomy; and third, in that the country is a federation of six republics and two autonomous provinces, in which the central government is relatively weak and many major decisions are made at the republic or province level. The Yugoslav foreign trade system is similar to that of CPE's in that most trade is carried out by FTO's operating on behalf of production enterprises. One difference is that FTO's can deal in several different commodities and can compete with one another. More importantly, decisions to import or export are generally initiated by the production enterprises. A firm that wishes to export commissions an FTO to sell the goods. Until recently, producers were allowed to keep 50 percent of their foreign exchange earnings and could use these funds practically in any way they wished.

The Yugoslav Government did retain some control over imports. As the debt crisis worsened, strict controls were placed on the use of new foreign credit. In the past few years, credit was granted only for the import of commodities that would result in exports. In addition, the Government has granted foreign exchange allocations on a matching basis with the importer for commodities considered important to meet domestic needs, such as vegetable oil. The Government has also been known to restrict exports in cases where excessive exports would jeopardize domestic supplies. An example was the ban on corn exports during 1984 and early 1985.

By the end of 1985, it became clear that the foreign trade system was out of control. Corn continued to be exported despite the ban. Much of the foreign exchange retained by producers of export goods ended up being exchanged at premium rates on the "grey market." Because of the extreme decentralization of Yugoslavia's federal system, each republic sought to protect its own balance of payments. As a result, Vojvodina and Croatia preferred to export their surplus corn rather than sell it to neighboring republics. The deficit producers were thus forced to import corn.

To control this situation, the Yugoslav Assembly recently passed the Foreign Exchange Act and the Foreign Trade in Merchandise and Services Act. According to

4/ *Magyar Nemzet*, Budapest, January 28, 1986.

the former, exporters must now turn over all of their foreign exchange earnings to their bank in exchange for dinars. The latter circumscribes importers' access to the foreign exchange market. Firms wishing to import must now apply for import rights, which will be granted on the basis of the firms' export/import ratio during the previous year. The law also places key agricultural imports, such as soybeans and soymeal, under quota. Further legislation places even tighter controls on foreign borrowing.

The legislation, assuming it is effective, may result in reduced imports of soybeans and meal, which are now under quota. But, the most significant effect felt by firms seeking a market in Yugoslavia will probably be an increase in red tape, since buyers will now have to apply for import rights.

Implications for Agricultural Trade with the United States

In some of the East European countries, end-users have more of a role in import decisions than previously. However, the reforms have been aimed mainly at increasing exports, and central planners retain considerable control over import decisions in all countries. For the most part, a western trader will still be dealing with an FTO, and the trader must be aware of central planners' priorities and the constraints placed on the FTO. Only in Yugoslavia and Hungary will a trader benefit from directly courting the end-user, and even in those countries, the

end-user will be severely constrained by national priorities, principally, the continuing need to conserve foreign exchange.

Once an FTO is authorized to arrange the import of a given commodity, two factors will affect its choice of supplier. One is the possibility of countertrade, since foreign exchange availability continues to be a serious constraint. The other consideration is price. Whereas East European import response to changes in world prices is difficult to determine, it is true that FTO's actively seek out the lowest priced supplier, all else being equal. U.S. exporters could raise their share in East European imports by offering more competitive prices and finding a way to accommodate greater imports from Eastern Europe.

What is encouraging for agricultural exporters, however, is that planners in most of the East European countries place high priority on ensuring basic food supplies for the population and maintaining livestock production. The notable exception is Romania, which has allowed serious food shortages to develop. But Yugoslavia and Hungary, despite financial constraints, have continued to import the quantities of soybeans and meal needed to maintain livestock production, and Yugoslavia targeted substantial foreign exchange for the import of vegetable oil. The extreme case is Bulgaria, which has responded to its production shortfalls with huge grain imports financed by resumed international borrowing.

EXPLANATORY NOTES

Agricultural land: Arable land (cultivated land, gardens, and orchards), meadows, and pastures.

Council for Mutual Economic Assistance (CEMA): Bulgaria, Cuba, Czechoslovakia, the German Democratic Republic (GDR), Hungary, Mongolia, Poland, Romania, the Soviet Union, and Vietnam.

Eastern Europe: Northern Countries—Czechoslovakia, the GDR, and Poland. Southern countries—Bulgaria, Hungary, Romania, and Yugoslavia.

Transshipments: U.S. exports destined for Eastern Europe and unloaded in Canada or

Western Europe, but reported by the U.S. Bureau of the Census as exports to the port of entry. Beginning in 1984, transshipments other than through Canada are no longer calculated because of their low value and difficulty in obtaining data.

Metric Units are used throughout:
One metric ton = 2,204.6 pounds
One kilogram = 2.2046 pounds
One hectare = 2.471 acres

Cattlehides: one piece = 22 kilograms
Milk: one liter = 1.031 kilograms

Statistical data in this report are taken from the yearbooks of the respective countries and from CEMA yearbooks. Other sources are noted as appropriate. Data on Albania are so scarce that the country is not covered here.

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Table 1. Production of grains, Eastern Europe, 1976-80 average and 1981-85 annual 1/

| Commodity and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania 2/ | Yugo-slavia | Total Eastern Europe |
|------------------------|----------|-----------------|----------|----------|--------|------------|-------------|----------------------|
| 1,000 tons | | | | | | | | |
| Wheat | | | | | | | | |
| 1976-80 | 3,513 | 4,949 | 2,998 | 5,186 | 5,089 | 6,104 | 5,306 | 33,145 |
| 1981 | 4,443 | 4,325 | 2,942 | 4,614 | 4,203 | 5,295 | 4,270 | 30,092 |
| 1982 | 4,913 | 4,606 | 2,739 | 5,762 | 4,476 | 6,455 | 5,218 | 34,169 |
| 1983 | 3,608 | 5,820 | 3,550 | 5,985 | 5,165 | 5,210 | 5,525 | 34,863 |
| 1984 | 4,836 | 6,170 | 3,903 | 7,392 | 6,010 | 7,578 | 5,595 | 41,484 |
| 1985 | (2,750) | 6,025 | 3,914 | (6,575) | 6,470 | (6,500) | 4,859 | (37,093) |
| Rye | | | | | | | | |
| 1976-80 | 20 | 578 | 1,748 | 135 | 6,474 | (50) | 87 | (9,092) |
| 1981 | 34 | 544 | 1,797 | 116 | 6,731 | (50) | 75 | (9,347) |
| 1982 | 34 | 583 | 2,119 | 117 | 7,792 | (50) | 84 | (10,779) |
| 1983 | 31 | 751 | 2,092 | 138 | 8,780 | (40) | 83 | (11,915) |
| 1984 | 37 | 710 | 2,510 | 193 | 9,540 | (50) | 81 | (13,121) |
| 1985 | (40) | 620 | 2,503 | 165 | 7,555 | (50) | 77 | (11,010) |
| Barley | | | | | | | | |
| 1976-80 | 1,532 | 3,386 | 3,715 | 772 | 3,560 | 1,981 | 664 | 15,610 |
| 1981 | 1,406 | 3,392 | 3,476 | 903 | 3,540 | 2,571 | 720 | 16,008 |
| 1982 | 1,436 | 3,654 | 4,055 | 871 | 3,647 | 3,052 | 669 | 17,384 |
| 1983 | 1,047 | 3,276 | 3,882 | 1,013 | 3,262 | 2,193 | 661 | 15,334 |
| 1984 | 1,279 | 3,677 | 4,138 | 1,220 | 3,555 | 2,448 | 748 | 17,065 |
| 1985 | (700) | 3,538 | 4,347 | (1,050) | 4,060 | (2,300) | 704 | (16,699) |
| Oats | | | | | | | | |
| 1976-80 | 70 | 423 | 525 | 90 | 2,434 | 56 | 298 | 3,896 |
| 1981 | 62 | 433 | 598 | 169 | 2,731 | 65 | 311 | 4,369 |
| 1982 | 50 | 491 | 848 | 123 | 2,608 | 91 | 269 | 4,480 |
| 1983 | 30 | 475 | 498 | 124 | 2,377 | 80 | 248 | 3,832 |
| 1984 | 25 | 480 | 700 | 156 | 2,604 | 94 | 256 | 4,315 |
| 1985 | (30) | 472 | 735 | (135) | 2,735 | (80) | 252 | (4,439) |
| Corn | | | | | | | | |
| 1976-80 | 2,652 | 724 | 2 | 6,374 | 165 | 11,097 | 9,192 | 30,206 |
| 1981 | 2,401 | 706 | 3 | 6,998 | 65 | 11,892 | 9,807 | 31,872 |
| 1982 | 3,418 | 941 | 1 | 7,959 | 68 | 12,620 | 11,126 | 36,133 |
| 1983 | 3,115 | 722 | --- | 6,426 | 64 | 11,982 | 10,719 | 33,028 |
| 1984 | 2,993 | 940 | --- | 6,686 | 57 | 13,274 | 11,293 | 35,243 |
| 1985 | (1,500) | 1,114 | --- | (6,765) | 105 | (14,000) | 9,896 | (33,380) |
| Rice | | | | | | | | |
| 1976-80 | 62 | --- | --- | 31 | --- | 48 | 34 | 175 |
| 1981 | 74 | --- | --- | 39 | --- | 49 | 42 | 204 |
| 1982 | 75 | --- | --- | 48 | --- | 46 | 42 | 211 |
| 1983 | 74 | --- | --- | 47 | --- | 84 | 40 | 245 |
| 1984 | 61 | --- | --- | 33 | --- | 110 | 36 | 240 |
| 1985 | (70) | --- | --- | 36 | --- | (90) | (40) | (236) |
| Other grains 3/ | | | | | | | | |
| 1976-80 | --- | --- | 49 | 45 | 1,773 | 47 | 7 | 1,921 |
| 1981 | --- | --- | 47 | 50 | 2,451 | 23 | 5 | 2,576 |
| 1982 | --- | --- | 259 | 39 | 2,575 | 21 | 4 | 2,898 |
| 1983 | --- | --- | 45 | 32 | 2,451 | 19 | 5 | 2,552 |
| 1984 | --- | --- | 98 | 49 | 2,626 | 25 | 4 | 2,802 |
| 1985 | --- | --- | (85) | (50) | 2,695 | (30) | (5) | (2,865) |
| Total grains | | | | | | | | |
| 1976-80 | 7,849 | 10,060 | 9,037 | 12,633 | 19,495 | 19,383 | 15,588 | 94,045 |
| 1981 | 8,420 | 9,400 | 8,863 | 12,889 | 19,721 | 19,945 | 15,230 | 94,468 |
| 1982 | 9,926 | 10,275 | 10,021 | 14,919 | 21,166 | 22,335 | 17,412 | 106,054 |
| 1983 | 7,905 | 11,044 | 10,067 | 13,765 | 22,099 | 19,608 | 17,281 | 101,769 |
| 1984 | 9,231 | 11,977 | 11,349 | 15,729 | 24,392 | 23,579 | 17,935 | 114,192 |
| 1985 | (5,090) | 11,769 | (11,584) | (14,776) | 23,620 | (23,050) | (15,833) | (105,722) |

--- = Data not available, or amount under 1,000 tons. () = Estimate.

1/ 1985 data are preliminary. 2/ For a discussion of the accuracy of Romanian production figures see the Grain and Feed section. 3/ Buckwheat, millet, spelt, mixed grains, triticale, and sorghum.

Table 2. Area of grains, Eastern Europe, 1976-80 average and 1981-85 annual 1/

| Commodity and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugo-slavia | Total Eastern Europe |
|---------------------------|----------|-----------------|---------|---------|--------|---------|-------------|----------------------|
| 1,000 hectares | | | | | | | | |
| Wheat | | | | | | | | |
| 1976-80 | 938 | 1,229 | 720 | 1,274 | 1,735 | 2,256 | 1,616 | 9,768 |
| 1981 | 1,032 | 1,090 | 675 | 1,151 | 1,418 | 2,101 | 1,386 | 8,853 |
| 1982 | 1,060 | 1,073 | 591 | 1,310 | 1,456 | 2,151 | 1,558 | 9,199 |
| 1983 | 1,128 | 1,192 | 754 | 1,355 | 1,537 | 2,222 | 1,609 | 9,797 |
| 1984 | 1,126 | 1,209 | 747 | 1,361 | 1,706 | 2,350 | 1,458 | 9,957 |
| 1985 | (965) | (1,215) | 744 | 1,356 | 1,885 | (2,300) | 1,348 | (9,813) |
| Rye | | | | | | | | |
| 1976-80 | 15 | 186 | 645 | 81 | 2,997 | (40) | 64 | (4,028) |
| 1981 | 27 | 171 | 656 | 74 | 3,002 | (40) | 54 | (4,024) |
| 1982 | 23 | 177 | 653 | 74 | 3,273 | (40) | 53 | (4,293) |
| 1983 | 25 | 203 | 713 | 72 | 3,448 | (40) | 51 | (4,552) |
| 1984 | 26 | 197 | 718 | 75 | 3,545 | (40) | 47 | (4,648) |
| 1985 | 25 | (180) | 691 | 85 | 3,085 | (40) | 45 | (4,151) |
| Barley | | | | | | | | |
| 1976-80 | 485 | 919 | 981 | 237 | 1,288 | 662 | 298 | 4,870 |
| 1981 | 382 | 996 | 964 | 286 | 1,294 | 917 | 310 | 5,149 |
| 1982 | 352 | 967 | 982 | 262 | 1,236 | 943 | 284 | 5,026 |
| 1983 | 323 | 822 | 890 | 277 | 1,099 | 741 | 280 | 4,432 |
| 1984 | 315 | 790 | 866 | 269 | 1,055 | 672 | 271 | 4,238 |
| 1985 | (300) | (765) | 882 | (280) | 1,240 | (700) | 264 | (4,431) |
| Oats | | | | | | | | |
| 1976-80 | 49 | 162 | 157 | 36 | 1,067 | 52 | 215 | 1,738 |
| 1981 | 46 | 160 | 172 | 55 | 1,156 | 62 | 194 | 1,845 |
| 1982 | 44 | 172 | 218 | 50 | 1,086 | 88 | 176 | 1,834 |
| 1983 | 34 | 154 | 163 | 48 | 1,042 | 70 | 168 | 1,679 |
| 1984 | 23 | 140 | 161 | 44 | 934 | 67 | 153 | 1,522 |
| 1985 | (25) | (130) | 178 | 44 | 995 | (70) | 151 | (1,593) |
| Corn | | | | | | | | |
| 1976-80 | 657 | 202 | --- | 1,312 | 41 | 3,295 | 2,256 | 7,763 |
| 1981 | 563 | 178 | 1 | 1,191 | 16 | 3,327 | 2,297 | 7,573 |
| 1982 | 621 | 184 | --- | 1,158 | 16 | 2,764 | 2,246 | 6,989 |
| 1983 | 596 | 204 | --- | 1,129 | 15 | 2,935 | 2,264 | 7,143 |
| 1984 | 542 | 235 | --- | 1,133 | 15 | 3,091 | 2,331 | 7,347 |
| 1985 | (700) | (245) | --- | (1,075) | 25 | (3,100) | 2,400 | (7,545) |
| Rice | | | | | | | | |
| 1976-80 | 17 | --- | --- | 23 | --- | 21 | 8 | 69 |
| 1981 | 16 | --- | --- | 13 | --- | 20 | 9 | 58 |
| 1982 | 16 | --- | --- | 13 | --- | 21 | 9 | 59 |
| 1983 | 16 | --- | --- | 13 | --- | 28 | 9 | 66 |
| 1984 | 16 | --- | --- | 13 | --- | 33 | 9 | 71 |
| 1985 | (16) | --- | --- | 12 | --- | (30) | (9) | (67) |
| Other grains 2/ 3/ | | | | | | | | |
| 1976-80 | --- | --- | 20 | (10) | 740 | 28 | 6 | (804) |
| 1981 | --- | --- | 17 | (20) | 1,021 | 16 | 4 | (1,078) |
| 1982 | --- | --- | 71 | (15) | 1,027 | 15 | 4 | (1,132) |
| 1983 | --- | --- | 18 | (14) | 964 | 16 | 3 | (1,015) |
| 1984 | --- | --- | 26 | (18) | 904 | 20 | 3 | (971) |
| 1985 | --- | --- | (25) | (23) | 950 | (20) | (3) | (1,021) |
| Total grains | | | | | | | | |
| 1976-80 | 2,161 | 2,699 | 2,524 | (2,973) | 7,868 | 6,354 | 4,463 | (29,042) |
| 1981 | 2,066 | 2,595 | 2,485 | (2,790) | 7,907 | 6,483 | 4,254 | (28,580) |
| 1982 | 2,116 | 2,574 | 2,515 | (2,882) | 8,094 | 6,022 | 4,330 | (28,533) |
| 1983 | 2,122 | 2,577 | 2,538 | (2,908) | 8,105 | 6,052 | 4,384 | (28,686) |
| 1984 | 2,048 | 2,571 | 2,518 | (2,913) | 8,159 | 6,273 | 4,275 | (28,757) |
| 1985 | (2,031) | (2,535) | (2,520) | (2,875) | 8,180 | (6,260) | (4,220) | (28,621) |

-- = Data not available, or amount under 1,000 hectares. () = Estimate.

1/ 1985 data are preliminary. 2/ Buckwheat, millet, spelt, mixed grains, triticale, and sorghum.

3/ Figures on area planted to private gardens in Hungary are not available.

Table 3. Grain trade, Eastern Europe, 1976-80 average and 1982-84 annual

| Commodity and country | Imports | | | | Exports | | | |
|----------------------------|----------|----------|---------|---------|---------|---------|---------|---------|
| | 1976-80 | 1982 | 1983 | 1984 | 1976-80 | 1982 | 1983 | 1984 |
| 1,000 tons | | | | | | | | |
| Wheat | | | | | | | | |
| Bulgaria | 124 | 60 | -- | 54 | 326 | 1,018 | 520 | 314 |
| Czechoslovakia | 519 | 262 | 220 | 206 | -- | 407 | 98 | -- |
| GDR 1/ | 953 | 731 | 1,543 | 1,657 | 59 | 75 | 95 | 87 |
| Hungary | 8 | 1 | -- | -- | 682 | 1,147 | 1,107 | 1,260 |
| Poland | 2,723 | 3,602 | 2,368 | 2,047 | -- | -- | -- | -- |
| Romania 2/ | (687) | (315) | (400) | (100) | (971) | (451) | (99) | (76) |
| Yugoslavia | 630 | 765 | 348 | 2 | 18 | 1 | 166 | (200) |
| Total | (5,644) | (5,736) | (4,879) | (4,066) | (2,056) | (3,099) | (2,085) | (1,937) |
| Barley | | | | | | | | |
| Bulgaria | 73 | -- | -- | 1 | 18 | -- | -- | -- |
| Czechoslovakia | 126 | -- | -- | (50) | 59 | 20 | 20 | (100) |
| GDR 1/ | 782 | 356 | 1,274 | 1,444 | 147 | 138 | 153 | 125 |
| Hungary | 130 | 1 | -- | -- | 8 | 22 | 24 | 2 |
| Poland | 1,410 | 144 | 354 | 79 | 16 | -- | -- | -- |
| Romania 2/ | (84) | -- | (300) | (350) | -- | -- | (30) | -- |
| Yugoslavia | 22 | 14 | 21 | -- | 4 | 6 | 1 | (8) |
| Total | (2,627) | 515 | (1,949) | (1,924) | 252 | 186 | (228) | (235) |
| Corn | | | | | | | | |
| Bulgaria | 367 | 390 | 181 | -- | 84 | -- | 39 | -- |
| Czechoslovakia | 942 | 1,064 | 502 | 368 | 6 | -- | -- | -- |
| GDR | 1,775 | 1,349 | 663 | 338 | -- | -- | -- | -- |
| Hungary | 116 | 1 | 10 | 8 | 330 | 438 | 264 | 198 |
| Poland | 1,985 | 413 | 521 | 437 | -- | -- | -- | -- |
| Romania 2/ | (590) | (342) | (110) | -- | (602) | (691) | (395) | (260) |
| Yugoslavia | 240 | 383 | -- | -- | 249 | 205 | 1,331 | 685 |
| Total | (6,015) | (3,942) | (1,987) | 1,151 | (1,271) | (1,334) | (2,029) | (1,143) |
| Other grains 2/, 3/ | | | | | | | | |
| Bulgaria | 5 | 2 | 3 | -- | -- | -- | -- | -- |
| Czechoslovakia | 14 | (50) | 8 | -- | 4 | (15) | (23) | -- |
| GDR | 342 | 92 | (267) | (233) | 170 | 133 | 116 | (100) |
| Hungary | 14 | 7 | 14 | -- | 15 | 14 | 10 | 19 |
| Poland | 675 | 88 | 39 | 4 | 18 | -- | 99 | 397 |
| Romania | (302) | (26) | (32) | -- | (4) | -- | -- | -- |
| Yugoslavia | 4 | 9 | 7 | 32 | 6 | 2 | -- | (11) |
| Total | (1,356) | (274) | (370) | (269) | (217) | (164) | (248) | (527) |
| Rice | | | | | | | | |
| Bulgaria | 7 | 5 | 20 | 5 | 1 | -- | -- | -- |
| Czechoslovakia | 78 | 66 | 50 | 78 | -- | -- | -- | -- |
| GDR | 44 | 31 | 23 | 43 | -- | -- | -- | -- |
| Hungary | 23 | 13 | 61 | 64 | -- | -- | -- | -- |
| Poland | 87 | 81 | 57 | 104 | 1 | -- | -- | -- |
| Romania | (56) | (62) | (64) | (60) | -- | (5) | (6) | (4) |
| Yugoslavia | 17 | 31 | 30 | -- | -- | -- | -- | -- |
| Total | (312) | (289) | (305) | (354) | 2 | (5) | (6) | (4) |
| Total grains | | | | | | | | |
| Bulgaria | 576 | 457 | 204 | 60 | 429 | 1,018 | 559 | 314 |
| Czechoslovakia | 1,679 | 1,442 | 780 | (702) | 69 | 442 | 141 | (100) |
| GDR | 3,896 | 2,559 | 3,770 | (3,715) | 376 | 346 | 364 | (312) |
| Hungary | 291 | 23 | 85 | 72 | 1,035 | 1,621 | 1,405 | (1,479) |
| Poland | 6,880 | 4,328 | 3,339 | 2,671 | 35 | -- | 99 | 397 |
| Romania 2/ | (1,719) | (745) | (906) | (510) | 1,577 | 1,147 | 530 | 340 |
| Yugoslavia | 913 | 1,202 | 406 | 34 | 277 | 214 | 1,498 | 904 |
| Total | (15,954) | (10,756) | (9,490) | (7,764) | 3,798 | 4,788 | 4,596 | (3,846) |

-- = Data not available, or amount less than 1,000 tons. () = Estimate.

1/ Trading partners data for exports only. 2/ FAO data for imports. 3/ Rye, oats, bran, and grain sorghum.

Table 4. Production of selected crops, Eastern Europe, 1976-80 average and 1981-85 annual 1/

| Commodity and year | Bulgaria | Czechoslovakia | GDR | Hungary | Poland | Romania | Yugoslavia | Total Eastern Europe |
|--------------------|----------|----------------|--------|---------|--------|---------|------------|----------------------|
| 1,000 tons | | | | | | | | |
| Potatoes | | | | | | | | |
| 1976-80 | 370 | 3,678 | 9,873 | 1,567 | 42,742 | 4,431 | 2,705 | 65,366 |
| 1981 | 403 | 3,743 | 10,378 | 1,608 | 42,562 | 4,447 | 2,774 | 65,915 |
| 1982 | 469 | 3,608 | 8,883 | 1,459 | 31,951 | 5,006 | 2,636 | 54,012 |
| 1983 | 427 | 3,177 | 7,063 | 1,234 | 34,473 | 6,204 | 2,580 | 55,158 |
| 1984 | 418 | 3,978 | 11,908 | 1,551 | 37,431 | 6,391 | 2,457 | 64,134 |
| 1985 | (415) | 3,450 | 12,168 | (1,400) | 36,500 | 6,685 | 2,431 | (63,049) |
| Sugarbeets | | | | | | | | |
| 1976-80 | 1,827 | 7,132 | 6,996 | 3,979 | 14,149 | 6,135 | 5,258 | 45,476 |
| 1981 | 1,136 | 6,969 | 8,043 | 4,719 | 15,867 | 5,441 | 6,224 | 48,399 |
| 1982 | 1,583 | 8,210 | 7,193 | 5,371 | 15,085 | 6,647 | 5,671 | 49,760 |
| 1983 | 746 | 6,041 | 5,711 | 3,783 | 16,364 | 4,819 | 5,666 | 43,130 |
| 1984 | 1,133 | 7,513 | 7,820 | 4,360 | 16,048 | 7,014 | 6,792 | 50,680 |
| 1985 | (800) | 7,746 | 7,350 | (4,025) | 14,700 | 6,450 | 6,268 | (47,339) |
| Sunflowerseed | | | | | | | | |
| 1976-80 | 392 | 17 | — | 300 | — | 821 | 433 | 1,963 |
| 1981 | 457 | 33 | — | 627 | — | 810 | 327 | 2,254 |
| 1982 | 511 | 36 | — | 582 | — | 847 | 202 | 2,178 |
| 1983 | 454 | 41 | — | 592 | — | 700 | 139 | 1,926 |
| 1984 | 462 | 43 | — | 600 | — | 851 | 154 | 2,110 |
| 1985 | (425) | 42 | — | (700) | — | 730 | 233 | (2,130) |
| Rapeseed | | | | | | | | |
| 1976-80 | — | 151 | 291 | 81 | 637 | 12 | 60 | 1,232 |
| 1981 | — | 200 | 284 | 76 | 496 | 14 | 65 | 1,135 |
| 1982 | — | 178 | 307 | 85 | 433 | 13 | 79 | 1,095 |
| 1983 | — | 314 | 259 | 93 | 554 | 21 | 103 | 1,344 |
| 1984 | — | 300 | 303 | 92 | 911 | 57 | 124 | 1,787 |
| 1985 | — | 285 | 380 | (100) | 1,080 | 15 | (120) | (1,980) |
| Soybeans | | | | | | | | |
| 1976-80 | 114 | 4 | — | 37 | — | 293 | 56 | 504 |
| 1981 | 105 | 7 | — | 43 | — | 268 | 92 | 515 |
| 1982 | 116 | 6 | — | 54 | — | 301 | 198 | 675 |
| 1983 | 82 | 5 | — | 52 | — | 259 | 210 | 608 |
| 1984 | 72 | 4 | — | 50 | — | 407 | 228 | 761 |
| 1985 | (80) | (4) | — | (70) | — | 270 | 174 | (598) |
| Tobacco | | | | | | | | |
| 1976-80 | 141 | 5 | 5 | 21 | 80 | 46 | 67 | 365 |
| 1981 | 113 | 6 | 4 | 23 | 96 | 28 | 70 | 360 |
| 1982 | 145 | 6 | 4 | 25 | 96 | 33 | 77 | 386 |
| 1983 | 112 | 6 | 5 | 21 | 100 | 25 | 67 | 336 |
| 1984 | 141 | 5 | 5 | 20 | 98 | 37 | 77 | 383 |
| 1985 | (125) | (5) | (5) | (20) | 110 | 25 | 80 | (370) |
| Corn silage | | | | | | | | |
| 1976-80 | 4,866 | 14,930 | 10,951 | 6,104 | 21,512 | 4,348 | 1,253 | 63,964 |
| 1981 | 5,053 | 15,642 | 13,434 | 7,287 | 20,836 | 4,403 | 1,622 | 68,277 |
| 1982 | 5,969 | 18,813 | 10,408 | 7,086 | 14,398 | 7,945 | 1,803 | 66,422 |
| 1983 | 6,630 | 14,898 | 10,614 | 6,271 | 11,876 | 6,694 | 2,083 | 59,066 |
| 1984 | 5,536 | 16,992 | 11,211 | 6,990 | 12,463 | 4,838 | 2,435 | 60,465 |
| Hay 2/ | | | | | | | | |
| 1976-80 | 2,052 | 6,129 | 4,809 | 2,903 | 8,294 | 5,636 | 3,414 | 33,237 |
| 1981 | 2,076 | 6,635 | 6,296 | 2,588 | 9,568 | 5,581 | 3,314 | 36,058 |
| 1982 | 2,182 | 6,451 | 5,079 | 2,674 | 8,166 | 6,300 | 3,120 | 33,972 |
| 1983 | 1,940 | 7,275 | 5,913 | 2,390 | 8,893 | (4,764) | 2,952 | (34,127) |
| 1984 | 2,131 | 7,536 | 6,444 | 2,504 | 9,570 | (5,696) | 3,029 | (36,910) |
| Feed roots | | | | | | | | |
| 1976-80 | 690 | 870 | 2,401 | 692 | 9,055 | 3,605 | 749 | 18,062 |
| 1981 | 431 | 795 | 2,721 | 645 | 11,722 | 3,276 | 675 | 20,265 |
| 1982 | 498 | 1,220 | 2,770 | 700 | 10,541 | 4,392 | 664 | 20,785 |
| 1983 | 346 | 1,060 | 2,355 | 625 | 10,351 | 3,675 | 614 | 19,026 |
| 1984 | 307 | 1,665 | 4,109 | 736 | 10,890 | 4,770 | 617 | 23,094 |

— = Data not available, or amount under 1,000 tons. () = Estimate.

1/ 1985 data are preliminary and unavailable for corn silage, hay, and feed roots.

2/ Does not include meadow hay and includes only lucerne, clover, and vetch in Yugoslavia.

Table 5. Area of selected crops, Eastern Europe, 1976-80 average and 1981-85 annual 1/

| Commodity and year | Bulgaria | Czechoslovakia | GDR | Hungary | Poland | Romania | Yugoslavia | Total Eastern Europe |
|--------------------|----------|----------------|-----|---------|--------|---------|------------|----------------------|
| 1,000 hectares | | | | | | | | |
| Potatoes | | | | | | | | |
| 1976-80 | 35 | 223 | 566 | 110 | 2,410 | 291 | 301 | 3,936 |
| 1981 | 37 | 200 | 505 | 88 | 2,257 | 299 | 291 | 3,677 |
| 1982 | 40 | 199 | 504 | 84 | 2,178 | 311 | 282 | 3,598 |
| 1983 | 41 | 193 | 483 | 77 | 2,220 | 319 | 274 | 3,607 |
| 1984 | 40 | 194 | 488 | 77 | 2,147 | 312 | 274 | 3,532 |
| 1985 | (40) | (185) | 475 | (75) | 2,100 | 310 | 274 | (3,459) |
| Sugarbeets | | | | | | | | |
| 1976-80 | 66 | 217 | 260 | 118 | 505 | 247 | 125 | 1,538 |
| 1981 | 56 | 219 | 262 | 122 | 470 | 282 | 147 | 1,558 |
| 1982 | 61 | 213 | 258 | 126 | 493 | 269 | 139 | 1,559 |
| 1983 | 33 | 211 | 238 | 109 | 486 | 257 | 141 | 1,475 |
| 1984 | 53 | 209 | 240 | 109 | 473 | 280 | 145 | 1,509 |
| 1985 | (50) | (205) | 232 | 107 | 436 | 265 | 150 | (1,445) |
| Sunflowerseed | | | | | | | | |
| 1976-80 | 233 | 13 | — | 185 | — | 515 | 214 | 1,160 |
| 1981 | 260 | 19 | — | 302 | — | 506 | 196 | 1,283 |
| 1982 | 253 | 22 | — | 297 | — | 496 | 138 | 1,206 |
| 1983 | 262 | 23 | — | 287 | — | 490 | 76 | 1,138 |
| 1984 | 253 | 27 | — | 317 | — | 480 | 81 | 1,158 |
| 1985 | (250) | (23) | — | (350) | — | 510 | 111 | (1,244) |
| Rapeseed | | | | | | | | |
| 1976-80 | — | 72 | 124 | 53 | 327 | 8 | 28 | 612 |
| 1981 | — | 95 | 124 | 56 | 277 | 13 | 31 | 596 |
| 1982 | — | 97 | 120 | 58 | 259 | 14 | 44 | 592 |
| 1983 | — | 118 | 122 | 52 | 247 | 24 | 46 | 609 |
| 1984 | — | 113 | 132 | 57 | 396 | 50 | 56 | 804 |
| 1985 | — | (115) | 144 | (56) | 470 | 15 | (66) | (866) |
| Soybeans | | | | | | | | |
| 1976-80 | 83 | 3 | — | 25 | — | 239 | 29 | 379 |
| 1981 | 94 | 2 | — | 24 | — | 310 | 48 | 478 |
| 1982 | 69 | 2 | — | 24 | — | 269 | 77 | 441 |
| 1983 | 64 | 3 | — | 30 | — | 275 | 107 | 479 |
| 1984 | 72 | 3 | — | 30 | — | 364 | 114 | 583 |
| 1985 | (75) | (3) | — | (40) | — | 300 | 101 | (519) |
| Tobacco | | | | | | | | |
| 1976-80 | 116 | 4 | 3 | 16 | 51 | 48 | 62 | 300 |
| 1981 | 106 | 4 | 3 | 15 | 49 | 39 | 56 | 272 |
| 1982 | 103 | 4 | 3 | 15 | 49 | 35 | 61 | 270 |
| 1983 | 108 | 4 | 3 | 13 | 53 | 35 | 60 | 276 |
| 1984 | 104 | 4 | 4 | 12 | 50 | 35 | 61 | 270 |
| 1985 | (90) | 4 | 4 | 13 | 55 | 35 | 68 | (269) |
| Corn silage | | | | | | | | |
| 1976-80 | 273 | 439 | 372 | 319 | 624 | 172 | 42 | 2,241 |
| 1981 | 341 | 423 | 366 | 346 | 577 | 53 | 57 | 2,163 |
| 1982 | 291 | 460 | 374 | 302 | 485 | 286 | 61 | 2,259 |
| 1983 | 279 | 436 | 373 | 354 | 422 | 198 | 71 | 2,133 |
| 1984 | 349 | 467 | 373 | 333 | 365 | 140 | 82 | 2,109 |
| Hay 2/ | | | | | | | | |
| 1976-80 | 453 | 957 | 540 | 656 | 1,698 | 942 | 659 | 5,905 |
| 1981 | 462 | 1,010 | 624 | 599 | 1,900 | 782 | 646 | 6,023 |
| 1982 | 483 | 1,004 | 598 | 588 | 1,851 | 913 | 623 | 6,060 |
| 1983 | 488 | 1,018 | 598 | 578 | 1,833 | 947 | 615 | 6,077 |
| 1984 | 490 | 984 | 592 | 579 | 1,760 | 900 | 624 | 5,929 |
| Feed roots | | | | | | | | |
| 1976-80 | 14 | 21 | 55 | 20 | 258 | 85 | 35 | 488 |
| 1981 | 11 | 17 | 60 | 19 | 273 | 90 | 34 | 504 |
| 1982 | 11 | 23 | 69 | 19 | 288 | 109 | 33 | 552 |
| 1983 | 8 | 29 | 61 | 18 | 258 | 97 | 33 | 504 |
| 1984 | 9 | 35 | 88 | 17 | 250 | 100 | 32 | 531 |

— = Data not available, or amount less than 1,000 hectares. () = Estimate.

1/ 1985 data are preliminary and unavailable for corn silage, hay, and feed roots. 2/ Does not include meadow hay and includes only lucerne, clover, and vetch in Yugoslavia.

Table 6. Trade of selected agricultural commodities, Eastern Europe, 1976-80 average and 1982-84 annual

| Commodity and country | Imports | | | | Exports | | | |
|---------------------------|---------|---------|---------|---------|---------|-------|-------|---------|
| | 1976-80 | 1982 | 1983 | 1984 | 1976-80 | 1982 | 1983 | 1984 |
| 1,000 tons | | | | | | | | |
| Oilseeds 1/ | | | | | | | | |
| Bulgaria | 9 | — | — | 46 | 22 | 13 | 12 | 11 |
| Czechoslovakia | 135 | 109 | 50 | 47 | 2 | 1 | — | — |
| GDR | 55 | 41 | 63 | 165 | 21 | 24 | 16 | (12) |
| Hungary | 8 | 7 | 10 | — | 86 | 176 | 98 | 130 |
| Poland | 143 | 99 | 192 | 45 | 51 | — | 1 | 59 |
| Romania | (251) | (252) | (331) | (422) | 4 | 2 | (2) | (2) |
| Yugoslavia | 163 | 219 | 303 | 382 | 16 | 2 | 3 | (7) |
| Total | (764) | (727) | (949) | (1,107) | 202 | 218 | (132) | (221) |
| Oilseed meal | | | | | | | | |
| Bulgaria | 194 | 163 | 272 | 418 | — | 2 | 36 | — |
| Czechoslovakia | 643 | 667 | 587 | 814 | 20 | 64 | 41 | — |
| GDR | 949 | 1,155 | 1,431 | 1,341 | 6 | 5 | 13 | 7 |
| Hungary | 614 | 565 | 836 | 742 | (1) | 29 | (1) | (2) |
| Poland | 1,160 | 856 | 447 | 925 | (5) | — | — | 34 |
| Romania | 297 | (135) | (115) | (69) | — | — | — | — |
| Yugoslavia | 172 | 215 | 188 | 141 | 3 | 1 | 2 | 1 |
| Total | 4,029 | (3,756) | (3,876) | (4,450) | (35) | 101 | (93) | (44) |
| Vegetable oil, edible | | | | | | | | |
| Bulgaria | 1 | 6 | 6 | 24 | 16 | 26 | 37 | 70 |
| Czechoslovakia | 44 | 41 | 51 | 44 | 1 | — | — | — |
| GDR | 113 | 107 | 83 | 83 | — | — | — | — |
| Hungary | 14 | 8 | 16 | 7 | 58 | 198 | 164 | 179 |
| Poland | 78 | 125 | 83 | 50 | 57 | 3 | 5 | 36 |
| Romania | 9 | 2 | 3 | 5 | 122 | 107 | 97 | 110 |
| Yugoslavia | 52 | 80 | 161 | 107 | 14 | 5 | 2 | 5 |
| Total | 311 | 369 | 403 | 320 | 268 | 339 | 305 | 400 |
| Meat and meat products 2/ | | | | | | | | |
| Bulgaria | 9 | 2 | 6 | 5 | 108 | 108 | 112 | 128 |
| Czechoslovakia | 26 | 26 | 25 | 16 | 32 | 76 | 39 | 46 |
| GDR | 24 | 63 | 112 | 69 | 133 | 126 | 130 | (144) |
| Hungary | 13 | 21 | 17 | 9 | 285 | 416 | 441 | 490 |
| Poland | 48 | 93 | 58 | 125 | 156 | 67 | 79 | 84 |
| Romania | 39 | 25 | 21 | (17) | 187 | 136 | 110 | 145 |
| Yugoslavia | 41 | 36 | 62 | 35 | 94 | 120 | 119 | 129 |
| Total | 200 | 266 | 301 | (276) | 995 | 1,049 | 1,030 | (1,166) |
| Sugar 3/ | | | | | | | | |
| Bulgaria | 219 | 246 | 391 | 375 | 2 | — | — | — |
| Czechoslovakia | 88 | 129 | 115 | 226 | 210 | 151 | 115 | 234 |
| GDR | 209 | 204 | 246 | 313 | 82 | (94) | (120) | (120) |
| Hungary | 84 | 1 | 1 | — | 31 | 42 | 50 | 3 |
| Poland | 58 | 73 | 71 | 60 | 208 | 163 | 233 | 314 |
| Romania | 139 | 114 | 180 | (210) | 72 | (89) | (79) | (180) |
| Yugoslavia | 85 | 37 | 139 | 215 | 78 | 10 | 18 | 17 |
| Total | 882 | 804 | 1,143 | (1,399) | 683 | (549) | (615) | (868) |
| Tobacco | | | | | | | | |
| Bulgaria | 7 | 20 | 26 | 42 | 69 | 65 | 63 | 64 |
| Czechoslovakia | 21 | 19 | 18 | 17 | 1 | — | — | — |
| GDR | 20 | 18 | 20 | 22 | 2 | 1 | 1 | 1 |
| Hungary | 7 | 7 | 7 | 5 | 1 | 2 | 4 | 4 |
| Poland | 12 | 11 | 14 | 13 | 9 | 5 | 5 | 6 |
| Romania | 1 | (2) | (3) | (1) | 7 | (5) | (4) | (3) |
| Yugoslavia | 4 | 8 | 8 | 8 | 24 | 25 | 28 | 18 |
| Total | 72 | (85) | (96) | (108) | 113 | (103) | (105) | (96) |
| Cotton | | | | | | | | |
| Bulgaria | 57 | 60 | 89 | 67 | — | — | — | — |
| Czechoslovakia | 109 | 126 | 119 | 126 | — | — | — | — |
| GDR | 90 | 105 | 105 | 149 | — | — | — | — |
| Hungary | 93 | 79 | 81 | 87 | — | — | — | — |
| Poland | 163 | 160 | 129 | 159 | — | — | — | — |
| Romania | 111 | 135 | 63 | 87 | — | — | — | — |
| Yugoslavia | 108 | 108 | 101 | 127 | — | — | — | — |
| Total | 731 | 773 | 687 | 802 | — | — | — | — |
| Hides and skins | | | | | | | | |
| Bulgaria | 6 | 6 | 10 | 11 | — | — | — | — |
| Czechoslovakia 4/ | (50) | (50) | (137) | — | — | — | — | — |
| GDR | 17 | 11 | 12 | 11 | — | — | — | — |
| Hungary | 31 | 30 | 32 | 29 | — | — | — | — |
| Poland | 42 | 50 | 39 | 37 | — | — | — | 2 |
| Romania | 44 | 29 | 36 | 35 | — | — | — | — |
| Yugoslavia | 27 | 25 | 29 | 31 | — | — | — | — |
| Total | (217) | (201) | (295) | (154) | — | — | — | 2 |

— = Data not available, or amount less than 1,000 tons. () = Estimate.

1/ Rapeseed, soybeans, and sunflowerseed. 2/ Includes poultry meat. 3/ Raw basis. 4/ Converted from pieces to metric tons at 22

Table 7. January livestock numbers, Eastern Europe,
1976-80 and 1981-85 averages and 1984-86 annual 1/

| Category and year | Bulgaria | Czechoslovakia | GDR | Hungary | Poland | Romania | Yugoslavia | Total Eastern Europe |
|-------------------------|----------|----------------|--------|----------|--------|----------|------------|----------------------------|
| 1,000 head | | | | | | | | |
| Cattle | | | | | | | | |
| 1976-80 | 1,733 | 4,754 | 5,544 | 1,926 | 12,339 | 6,361 | 5,575 | 38,232 |
| 1981-85 | 1,783 | 5,115 | 5,756 | 1,919 | 11,163 | 6,565 | 5,339 | 37,640 |
| 1984 | 1,778 | 5,190 | 5,768 | 1,907 | 11,085 | 6,752 | 5,341 | 37,821 |
| 1985 | 1,751 | 5,150 | 5,848 | 1,901 | 10,906 | 7,039 | 5,199 | 37,794 |
| 1986 | (1,750) | 5,065 | 5,827 | 1,766 | 10,770 | (6,780) | 5,159 | (37,117) |
| Cows | | | | | | | | |
| 1976-80 | 697 | 1,902 | 2,145 | 773 | 5,914 | 2,612 | 3,181 | 17,224 |
| 1981-85 | 699 | 1,896 | 2,112 | 747 | 5,670 | 2,600 | 3,033 | 16,757 |
| 1984 | 695 | 1,896 | 2,096 | 735 | 5,687 | 2,583 | 3,005 | 16,697 |
| 1985 | 687 | 1,880 | 2,080 | 725 | 5,205 | 2,593 | 2,997 | 16,167 |
| 1986 | (690) | 1,860 | 2,064 | 688 | 5,350 | (2,500) | 2,990 | (16,142) |
| Hogs | | | | | | | | |
| 1976-80 | 3,669 | 7,240 | 11,683 | 7,805 | 20,219 | 9,997 | 7,513 | 68,126 |
| 1981-85 | 3,793 | 7,227 | 12,819 | 8,948 | 17,689 | 13,155 | 8,703 | 72,334 |
| 1984 | 3,769 | 7,070 | 13,058 | 9,844 | 15,858 | 14,347 | 9,337 | 73,283 |
| 1985 | 3,734 | 6,743 | 13,191 | 9,235 | 17,207 | 14,777 | 8,675 | 73,562 |
| 1986 | (3,920) | 6,651 | 12,946 | 8,280 | 19,160 | (12,695) | 8,111 | (71,763) |
| Sheep | | | | | | | | |
| 1976-80 | 10,105 | 837 | 1,925 | 2,560 | 3,452 | 14,818 | 7,504 | 41,201 |
| 1981-85 | 10,680 | 994 | 2,258 | 3,044 | 3,816 | 17,432 | 7,497 | 45,721 |
| 1984 | 10,978 | 1,041 | 2,359 | 2,977 | 3,989 | 18,451 | 7,458 | 47,253 |
| 1985 | 10,501 | 1,068 | 2,528 | 2,832 | 4,413 | 18,637 | 7,678 | 47,657 |
| 1986 | 10,210 | (1,090) | 2,591 | 2,465 | 4,800 | (16,195) | 7,829 | (45,180) |
| Horses | | | | | | | | |
| 1976-80 | 126 | 54 | 67 | 141 | 1,970 | 565 | 751 | 3,674 |
| 1981-85 | 119 | 45 | 83 | 111 | 1,641 | (603) | 480 | 3,083 |
| 1984 | 119 | 45 | 88 | 111 | 1,570 | 620 | 463 | 3,016 |
| 1985 | 118 | 46 | 101 | 102 | 1,504 | (640) | 438 | (2,949) |
| 1986 | (120) | (45) | 103 | 98 | 1,500 | (640) | 425 | (2,931) |
| Poultry | | | | | | | | |
| 1976-80 | 39,989 | 44,871 | 49,102 | 63,002 | 86,259 | 90,858 | 59,752 | 433,833 |
| 1981-85 | 42,081 | 48,676 | 52,339 | 65,082 | 71,837 | 112,266 | 70,387 | 462,668 |
| 1984 | 43,078 | 50,977 | 53,018 | 63,276 | 62,439 | 119,237 | 74,008 | 466,033 |
| 1985 | 42,275 | 48,519 | 51,317 | 62,046 | 69,300 | 123,962 | 70,453 | 467,872 |
| 1986 | (39,150) | 47,278 | 50,709 | (61,380) | 72,765 | 113,120 | 71,200 | (455,602) |

() = Estimate.

1/ 1986 data are preliminary.

Table 8. Production of principal livestock products, Eastern Europe,
1976-80 average and 1981-85 annual 1/

| Category and year | Bulgaria | Czechoslovakia | GDR | Hungary | Poland | Romania | Yugoslavia | Total Eastern Europe |
|--------------------------------|----------|----------------|---------|---------|---------|---------|------------|----------------------|
| 1,000 tons | | | | | | | | |
| Total meat 2/, 3/ | | | | | | | | |
| 1976-80 | 745 | 1,423 | 1,821 | 1,472 | 3,064 | 1,623 | 1,398 | 11,546 |
| 1981 | 794 | 1,526 | 1,997 | 1,578 | 2,526 | 1,786 | 1,519 | 11,726 |
| 1982 | 807 | 1,413 | 1,835 | 1,691 | 2,580 | (1,640) | 1,543 | (11,509) |
| 1983 | 837 | 1,483 | 1,873 | 1,769 | 2,509 | (1,649) | 1,535 | (11,655) |
| 1984 | 848 | 1,536 | 1,988 | 1,825 | (2,534) | (1,780) | 1,645 | (12,156) |
| 1985 | (835) | (1,558) | (2,025) | (1,658) | (2,760) | (1,850) | (1,490) | (12,176) |
| Beef and veal 2/ | | | | | | | | |
| 1976-80 | 143 | 424 | 447 | 203 | 869 | 306 | 362 | 2,754 |
| 1981 | 150 | 423 | 452 | 196 | 623 | 289 | 356 | 2,489 |
| 1982 | 162 | 424 | 441 | 207 | 799 | (230) | 376 | (2,639) |
| 1983 | 165 | 435 | 421 | 198 | 772 | (210) | 373 | (2,574) |
| 1984 | 166 | 462 | 436 | 193 | (825) | (236) | 388 | (2,706) |
| 1985 | (160) | (470) | (450) | (200) | (855) | (240) | (340) | (2,715) |
| Mutton, lamb, and goat meat 2/ | | | | | | | | |
| 1976-80 | 99 | 6 | 20 | 15 | 29 | 76 | 60 | 305 |
| 1981 | 113 | 7 | 19 | 19 | 27 | 64 | 58 | 307 |
| 1982 | 111 | 8 | 19 | 19 | 27 | (75) | 59 | (318) |
| 1983 | 114 | 10 | 16 | 20 | 27 | (75) | 62 | (324) |
| 1984 | 123 | 11 | 21 | 17 | (32) | (91) | 58 | (353) |
| 1985 | (115) | (11) | (22) | (16) | (30) | (100) | (57) | (351) |
| Pork 2/, 4/ | | | | | | | | |
| 1976-80 | 349 | 803 | 1,198 | 922 | 1,728 | 876 | 720 | 6,596 |
| 1981 | 380 | 888 | 1,358 | 991 | 1,384 | 1,008 | 784 | 6,793 |
| 1982 | 378 | 772 | 1,211 | 1,040 | 1,512 | (890) | 786 | (6,589) |
| 1983 | 394 | 827 | 1,264 | 1,142 | 1,444 | (894) | 772 | (6,737) |
| 1984 | 391 | 846 | 1,346 | 1,205 | (1,338) | (983) | 846 | (6,955) |
| 1985 | (395) | (855) | (1,375) | (1,035) | (1,520) | (1,035) | (740) | (6,955) |
| Poultry meat 2/ | | | | | | | | |
| 1976-80 | 149 | 159 | 137 | 328 | 374 | 363 | 250 | 1,760 |
| 1981 | 147 | 170 | 149 | 367 | 455 | 422 | 286 | 1,996 |
| 1982 | 153 | 170 | 147 | 19 | 197 | (440) | 282 | (1,808) |
| 1983 | 161 | 167 | 153 | 404 | 199 | (465) | 287 | (1,836) |
| 1984 | 166 | 169 | 157 | 405 | (265) | (465) | (311) | (1,938) |
| 1985 | (160) | (175) | (170) | (407) | (290) | (470) | (305) | (1,977) |
| Milk 5/ | | | | | | | | |
| 1976-80 | 1,653 | 5,629 | 8,155 | 2,283 | 16,805 | 4,164 | 4,136 | 42,825 |
| 1981 | 1,900 | 5,918 | 8,202 | 2,680 | 15,341 | 3,601 | 4,484 | 42,126 |
| 1982 | 2,000 | 5,931 | 7,678 | 2,741 | 15,293 | 3,365 | 4,602 | 41,610 |
| 1983 | 2,196 | 6,495 | 8,203 | 2,809 | 16,097 | 3,853 | 4,609 | 44,262 |
| 1984 | (2,230) | 6,763 | 8,729 | 2,834 | 16,797 | 4,069 | 4,577 | (45,999) |
| 1985 | (2,200) | 6,885 | 9,025 | 2,720 | 16,530 | (3,700) | (4,600) | (45,660) |
| Million units | | | | | | | | |
| Eggs | | | | | | | | |
| 1976-80 | 2,163 | 4,691 | 5,287 | 4,475 | 8,523 | 6,583 | 4,117 | 35,839 |
| 1981 | 2,431 | 4,968 | 5,670 | 4,394 | 8,816 | 7,017 | 4,427 | 37,723 |
| 1982 | 2,459 | 5,030 | 5,696 | 4,361 | 7,633 | 7,155 | 4,612 | 36,946 |
| 1983 | 2,615 | 5,232 | 5,850 | 4,444 | 7,642 | 7,465 | 4,567 | 37,815 |
| 1984 | 2,680 | 5,504 | 5,779 | 4,239 | 8,202 | 8,013 | (4,640) | (39,057) |
| 1985 | (2,760) | 5,499 | 4,831 | 4,000 | 8,500 | (8,015) | (4,650) | (38,255) |

() = Estimate.

1/ 1985 data are preliminary. 2/ Data include offal and edible slaughter fat, and live animal exports for slaughter. CEMA data except for Yugoslavia. 3/ Data include horse and rabbit meat. 4/ Yugoslav series revised to omit double counting of some offals. 5/ Data include only cow milk for consumption in Romania, Yugoslavia, and Hungary. Data in the remaining countries include milk sucked by calves. In the GDR, milk production is given in 3.5 percent fat equivalent.

Table 9. Per capita consumption of selected foods, Eastern Europe, 1975 and 1980-85 1/

| Commodity and year | Bulgaria | Czechoslovakia | GDR | Hungary | Poland | Romania 2/ | Yugoslavia |
|----------------------------|----------|----------------|-------|---------|--------|------------|------------|
| Kilograms | | | | | | | |
| Total meat 3/ | | | | | | | |
| 1975 | 58.0 | 81.1 | 77.8 | 89.9 | 70.3 | 45.7 | 48.3 |
| 1980 | 64.9 | 85.6 | 89.5 | 93.6 | 74.0 | 60.0 | 54.2 |
| 1981 | 70.9 | 86.6 | 90.7 | 95.5 | 65.0 | --- | 54.9 |
| 1982 | 73.1 | 79.5 | 91.0 | 96.7 | 58.5 | 4/ 65.0 | 52.4 |
| 1983 | 73.8 | 83.7 | 92.1 | 98.3 | 58.3 | 4/ (58.0) | 53.8 |
| 1984 | 75.4 | 84.5 | 94.4 | 101.2 | 57.2 | 4/ (57.0) | (53.0) |
| 1985 | (75.0) | 85.0 | 96.0 | 104.0 | (57.2) | 4/ (57.0) | (52.0) |
| Eggs 5/ | | | | | | | |
| 1975 | 146 | 297 | 269 | 274 | 209 | 214 | 166 |
| 1980 | 204 | 316 | 289 | 317 | 222 | 270 | 190 |
| 1981 | 209 | 321 | 288 | 314 | 227 | --- | 183 |
| 1982 | 220 | 324 | 301 | 307 | 200 | 270 | 187 |
| 1983 | 231 | 328 | 302 | 327 | 200 | (270) | 193 |
| 1984 | 237 | 332 | 303 | 327 | 210 | (270) | (195) |
| 1985 | (240) | 332 | (300) | (325) | (210) | (280) | (195) |
| Vegetable oil | | | | | | | |
| 1975 | 14.1 | 6.7 | 2.0 | 2.9 | 6.5 | --- | 10.6 |
| 1980 | 14.8 | 7.2 | 1.6 | 4.2 | 7.0 | --- | 11.3 |
| 1981 | 14.9 | 7.3 | 1.6 | 4.4 | 7.0 | --- | 12.1 |
| 1982 | 14.8 | 7.6 | 1.8 | 4.8 | 5.9 | --- | 12.3 |
| 1983 | 14.8 | 7.1 | 1.7 | 5.0 | 6.6 | --- | 12.3 |
| 1984 | 14.8 | 7.2 | 1.8 | 4.9 | 7.6 | --- | (12.3) |
| Sugar | | | | | | | |
| 1975 | 32.5 | 38.0 | 36.8 | 39.4 | 43.2 | 20.3 | 32.8 |
| 1980 | 34.7 | 37.5 | 40.6 | 37.9 | 41.4 | 28.2 | 36.6 |
| 1981 | 35.1 | 36.9 | 40.8 | 35.5 | 33.4 | --- | 36.1 |
| 1982 | 35.1 | 39.6 | 41.9 | 38.0 | 41.7 | --- | 34.1 |
| 1983 | 35.4 | 37.8 | 39.2 | 35.6 | 45.0 | --- | 34.5 |
| 1984 | 35.5 | 37.5 | 39.1 | 34.0 | 45.0 | --- | (34.0) |
| Grain, in flour equivalent | | | | | | | |
| 1975 | 162 | 108 | 95 | 122 | 120 | 189 | 183 |
| 1980 | 160 | 107 | 95 | 115 | 127 | 172 | 178 |
| 1981 | 159 | 109 | 95 | 113 | 122 | 180 | 179 |
| 1982 | 159 | 110 | 97 | 113 | 119 | 173 | 173 |
| 1983 | 150 | 108 | 97 | 111 | 118 | (173) | 178 |
| 1984 | 149 | 109 | 100 | 110 | 124 | (173) | (178) |
| Vegetables | | | | | | | |
| 1975 | 127 | 74 | 90 | 85 | 109 | 113 | 87 |
| 1980 | 125 | 66 | 94 | 80 | 101 | 140 | 97 |
| 1981 | 135 | 66 | 93 | 77 | 118 | --- | 98 |
| 1982 | 147 | 75 | 96 | 76 | 107 | 170 | 96 |
| 1983 | 127 | 71 | 91 | 78 | 103 | (170) | 83 |
| 1984 | 132 | 73 | 92 | 77 | 116 | (170) | (85) |
| Potatoes | | | | | | | |
| 1975 | 23 | 96 | 142 | 67 | 173 | 96 | 66 |
| 1980 | 27 | 76 | 143 | 61 | 158 | 71 | 61 |
| 1981 | 30 | 79 | 140 | 59 | 157 | --- | 59 |
| 1982 | 31 | 79 | 145 | 57 | 159 | 100 | 61 |
| 1983 | 31 | 79 | 144 | 58 | 154 | (100) | 61 |
| 1984 | 30 | 79 | 146 | 58 | 149 | (105) | (61) |

--- = Data not available. () = Estimate.

1/ 1985 data are preliminary and listed if available. 2/ *Revista Economica*, Bucharest, Dec. 29, 1978; *Lumea*, Oct. 30, 1981; Bucharest Domestic Service, Nov. 1, 1981; *Scinteia*, Nov. 29, 1981, Bucharest; unpublished official statistics. 3/ Hungarian series revised to include edible offals and fats. *Vestnik statistiki* #4, 1985, Moscow. 4/ Includes fish. 5/ Units.

Table 10. Total and agricultural trade, Eastern Europe, 1980-85 1/

| Category and year | Bulgaria | Czechoslovakia | GDR | Hungary | Poland | Romania | Yugoslavia | Total Eastern Europe |
|----------------------------|----------|----------------|----------|---------|----------|----------|------------|----------------------|
| Million dollars | | | | | | | | |
| Exports 2/ | | | | | | | | |
| 1980 | 10,372 | 14,891 | 17,312 | 8,877 | 16,997 | 11,024 | 9,077 | 88,550 |
| 1981 | 10,685 | 14,782 | 18,856 | 8,894 | 13,249 | 12,367 | 10,363 | 89,196 |
| 1982 | 11,428 | 15,694 | 21,743 | 9,057 | 11,214 | 11,559 | 10,460 | 91,155 |
| 1983 | 12,129 | 16,477 | 23,793 | 8,880 | 11,572 | 11,512 | 9,913 | 94,276 |
| 1984 | 12,500 | (17,400) | 24,836 | 8,837 | 11,750 | 12,646 | 9,993 | (97,962) |
| 1985 | (12,258) | (18,253) | (27,022) | (8,700) | (11,950) | (12,727) | 10,642 | (101,552) |
| Imports 2/ | | | | | | | | |
| 1980 | 9,650 | 15,148 | 19,082 | 9,020 | 19,089 | 12,685 | 15,064 | 99,738 |
| 1981 | 10,779 | 14,634 | 20,181 | 8,855 | 15,476 | 12,264 | 15,757 | 97,946 |
| 1982 | 11,526 | 15,592 | 20,196 | 8,579 | 10,244 | 9,745 | 13,334 | 89,216 |
| 1983 | 12,283 | 16,324 | 21,525 | 8,452 | 10,590 | 9,643 | 12,154 | 90,971 |
| 1984 | 12,359 | 17,600 | 22,940 | 8,023 | 10,638 | 10,334 | 11,644 | 93,538 |
| 1985 | (13,476) | (18,621) | (24,999) | (8,400) | (11,361) | (9,821) | 12,164 | (98,842) |
| Balance | | | | | | | | |
| 1980 | 722 | -257 | -1,770 | -143 | -2,092 | -1,661 | -5,987 | -11,188 |
| 1981 | -94 | 148 | -1,325 | 39 | -2,227 | 103 | -5,394 | -8,750 |
| 1982 | -98 | 102 | 1,547 | 478 | 970 | 1,814 | -2,874 | 1,939 |
| 1983 | -154 | 153 | 2,268 | 428 | 982 | 1,869 | -2,241 | 3,305 |
| 1984 | 141 | (-200) | 1,896 | 814 | 1,112 | 2,312 | -1,651 | 4,424 |
| 1985 | (-1,218) | (-368) | (2,023) | (300) | (589) | (2906) | (-1,522) | (2,710) |
| Agricultural exports 3/ | | | | | | | | |
| 1980 | 1,525 | 688 | 593 | 1,990 | 1,107 | 1,410 | 1,086 | 8,399 |
| 1981 | 1,331 | 636 | 616 | 2,251 | 653 | 1,320 | 1,204 | 8,011 |
| 1982 | 1,446 | 586 | 496 | 2,243 | 659 | 1,011 | 1,272 | 7,713 |
| 1983 | 1,384 | 553 | 416 | 2,038 | 761 | 783 | 1,191 | 7,126 |
| 1984 | 1,162 | 524 | 377 | 1,960 | 850 | 859 | 1,006 | 6,738 |
| Agricultural imports 3/ | | | | | | | | |
| 1980 | 674 | 2,025 | 2,470 | 1,070 | 3,098 | 1,432 | 1,641 | 12,410 |
| 1981 | 800 | 1,880 | 2,187 | 1,041 | 3,074 | 1,573 | 1,478 | 12,033 |
| 1982 | 631 | 1,759 | 1,964 | 732 | 1,852 | 839 | 1,310 | 9,087 |
| 1983 | 833 | 1,658 | 2,429 | 796 | 1,324 | 748 | 1,085 | 8,873 |
| 1984 | 828 | 1,564 | 2,185 | 749 | 1,445 | 660 | 1,155 | 8,586 |
| Agricultural trade balance | | | | | | | | |
| 1980 | 851 | -1,337 | -1,877 | 920 | -1,991 | -22 | -555 | -4,011 |
| 1981 | 531 | -1,244 | -1,571 | 1,210 | -2,421 | -253 | -274 | -4,022 |
| 1982 | 815 | -1,173 | -1,468 | 1,511 | -1,193 | 172 | -38 | -1,374 |
| 1983 | 551 | -1,105 | -2,013 | 1,242 | -563 | 35 | 106 | -1,747 |
| 1984 | 334 | -1,040 | -1,808 | 1,211 | -595 | 199 | -149 | -1,848 |

() = Estimate.

1/ 1985 data are preliminary and unavailable for agricultural trade. 2/ United Nations data. 3/ FAO data.

Table 11. U.S. total and agricultural trade with Eastern Europe, 1981-85

| Category and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugo-slavia | Total Eastern Europe |
|------------------------------|----------|-----------------|-------|---------|--------|---------|-------------|----------------------|
| Million dollars | | | | | | | | |
| Total exports | | | | | | | | |
| 1981 | 264.4 | 7.2 | 344.4 | 77.5 | 684.1 | 548.8 | 657.0 | 2,675.4 |
| 1982 | 106.6 | 111.7 | 236.6 | 67.8 | 294.1 | 223.3 | 554.6 | 1,594.7 |
| 1983 | 65.4 | 72.4 | 147.5 | 109.8 | 320.4 | 185.7 | 603.9 | 1,505.1 |
| 1984 | 44.1 | 58.1 | 135.8 | 85.2 | 314.8 | 246.2 | 429.9 | 1,314.1 |
| 1985 | 103.5 | 62.6 | 72.3 | 92.1 | 233.7 | 206.5 | 593.2 | 1,363.9 |
| Total imports | | | | | | | | |
| 1981 | 25.6 | 67.2 | 44.7 | 127.9 | 359.9 | 559.4 | 445.5 | 1,630.2 |
| 1982 | 25.1 | 61.5 | 51.8 | 133.2 | 212.9 | 339.1 | 355.9 | 1,179.5 |
| 1983 | 32.8 | 62.8 | 56.9 | 154.5 | 190.6 | 512.8 | 366.5 | 1,376.9 |
| 1984 | 30.3 | 84.2 | 149.1 | 220.1 | 215.7 | 896.7 | 477.8 | 2,073.9 |
| 1985 | 34.0 | 74.9 | 90.3 | 216.6 | 217.0 | 881.3 | 600.5 | 2,114.6 |
| Balance | | | | | | | | |
| 1981 | 238.8 | 30.0 | 299.7 | -50.4 | 324.2 | -10.6 | 211.5 | 1,043.2 |
| 1982 | 81.5 | 50.2 | 184.8 | -65.4 | 81.2 | -115.8 | 198.7 | 415.2 |
| 1983 | 32.6 | 9.6 | 90.6 | -44.7 | 129.8 | -327.1 | 237.4 | 128.2 |
| 1984 | 13.8 | -26.1 | -13.3 | -134.9 | 99.1 | -650.5 | -47.9 | -759.8 |
| 1985 | 69.5 | -12.3 | -18.0 | -124.5 | 16.7 | -674.8 | -7.3 | -750.7 |
| Total agricul-tural exports | | | | | | | | |
| 1981 | 203.6 | 73.0 | 333.0 | 12.9 | 596.4 | 413.3 | 148.8 | 1,781.0 |
| 1982 | 64.1 | 90.2 | 217.8 | 7.1 | 181.8 | 133.6 | 182.0 | 876.6 |
| 1983 | 37.1 | 36.5 | 139.5 | 58.1 | 205.5 | 118.1 | 304.2 | 899.0 |
| 1984 | 17.0 | 28.4 | 129.2 | 42.6 | 194.2 | 157.1 | 188.9 | 757.4 |
| 1985 | 50.9 | 19.4 | 64.9 | 35.3 | 92.2 | 81.4 | 135.0 | 479.1 |
| Direct agricul-tural exports | | | | | | | | |
| 1981 | 197.3 | 58.2 | 284.2 | 12.9 | 592.9 | 368.4 | 137.9 | 1,651.8 |
| 1982 | 64.0 | 62.1 | 203.9 | 7.1 | 180.3 | 133.6 | 182.0 | 833.0 |
| 1983 | 37.1 | 21.2 | 130.9 | 58.1 | 205.0 | 118.1 | 268.1 | 838.5 |
| 1984 | 17.0 | 28.4 | 129.2 | 42.6 | 194.2 | 157.1 | 188.9 | 757.4 |
| 1985 | 50.9 | 19.4 | 64.9 | 35.3 | 92.2 | 81.4 | 135.0 | 479.1 |
| Transshipments 1/ | | | | | | | | |
| 1981 | 6.3 | 14.8 | 48.8 | 0.0 | 3.5 | 44.9 | 10.9 | 129.2 |
| 1982 | 0.1 | 28.1 | 13.9 | 0.0 | 1.5 | 0.0 | 0.0 | 43.6 |
| 1983 | 0.0 | 15.3 | 8.6 | 0.0 | 0.5 | 0.0 | 36.1 | 60.5 |
| Total agricul-tural imports | | | | | | | | |
| 1981 | 21.5 | 12.1 | 0.9 | 33.7 | 109.1 | 28.0 | 71.7 | 277.0 |
| 1982 | 21.7 | 13.5 | 2.5 | 33.1 | 69.3 | 18.7 | 69.0 | 227.8 |
| 1983 | 30.6 | 7.7 | 2.0 | 43.3 | 105.1 | 19.5 | 56.3 | 264.5 |
| 1984 | 23.0 | 10.1 | 1.2 | 46.3 | 94.2 | 20.0 | 65.3 | 260.1 |
| 1985 | 20.8 | 7.6 | 2.5 | 55.7 | 106.9 | 8.9 | 60.9 | 263.3 |
| Balance | | | | | | | | |
| 1981 | 182.1 | 60.9 | 332.1 | -20.8 | 487.3 | 385.3 | 77.1 | 1,504.0 |
| 1982 | 42.4 | 76.7 | 215.3 | -26.0 | 112.5 | 114.9 | 113.0 | 648.8 |
| 1983 | 6.5 | 28.8 | 137.5 | 14.8 | 100.4 | 98.6 | 247.9 | 634.5 |
| 1984 | -6.0 | 18.3 | 128.0 | -3.7 | 100.0 | 137.1 | 123.6 | 497.3 |
| 1985 | 30.1 | 11.8 | 62.4 | -20.4 | -14.7 | 72.5 | 74.1 | 215.8 |

1/ Estimated shipments through Belgium, Canada, the Federal Republic of Germany, and the Netherlands for 1981 through 1983. Beginning in 1984, transshipments other than through Canada are no longer being calculated, because of their decline in value and the difficulty in obtaining data. Canadian transshipments are included in direct exports.

Sources: Bureau of the Census, Department of Commerce; U.S. Export Sales, FAS/USDA.

Table 12. Volume and value of U.S. agricultural imports from Eastern Europe, 1976-80 and 1981-85 averages and 1983-85 annual

| Commodity and country | 1976-80 | 1981-85 | 1983 | 1984 | 1985 |
|-----------------------|---------|---------|-------|-------|-------|
| 1,000 tons | | | | | |
| Processed meat | -- | -- | -- | -- | -- |
| Bulgaria | -- | -- | -- | -- | -- |
| Czechoslovakia | 1.1 | 1.2 | 0.6 | 0.8 | 1.2 |
| GDR | -- | -- | -- | -- | -- |
| Hungary | 7.6 | 11.2 | 11.0 | 13.4 | 17.4 |
| Poland | 39.4 | 25.7 | 27.4 | 26.2 | 32.7 |
| Romania | 6.9 | 3.9 | 4.4 | 3.2 | 2.0 |
| Yugoslavia | 14.6 | 11.0 | 9.9 | 14.1 | 9.4 |
| Total | 69.6 | 52.9 | 53.3 | 57.7 | 62.7 |
| Million dollars | | | | | |
| Processed meat | -- | -- | -- | -- | -- |
| Bulgaria | -- | -- | -- | -- | -- |
| Czechoslovakia | 3.4 | 3.2 | 2.0 | 1.8 | 2.5 |
| GDR | 0.1 | -- | -- | -- | -- |
| Hungary | 23.7 | 31.3 | 32.6 | 33.8 | 40.6 |
| Poland | 131.3 | 81.2 | 86.8 | 78.1 | 91.7 |
| Romania | 18.9 | 9.1 | 9.7 | 6.3 | 3.9 |
| Yugoslavia | 47.2 | 30.9 | 28.0 | 30.5 | 20.5 |
| Total | 224.6 | 155.7 | 159.1 | 150.5 | 159.2 |
| Other products 1/ | -- | -- | -- | -- | -- |
| Bulgaria | 19.9 | 23.5 | 30.6 | 23.0 | 20.8 |
| Czechoslovakia | 3.3 | 7.0 | 5.7 | 8.3 | 5.1 |
| GDR | 2.0 | 1.8 | 2.0 | 1.2 | 2.5 |
| Hungary | 5.2 | 11.2 | 10.7 | 12.5 | 15.1 |
| Poland | 17.5 | 15.8 | 8.3 | 16.1 | 15.2 |
| Romania | 7.6 | 10.0 | 9.8 | 13.7 | 5.0 |
| Yugoslavia | 38.0 | 33.7 | 28.3 | 34.8 | 40.4 |
| Total | 93.5 | 102.9 | 105.4 | 109.6 | 104.1 |
| Total | -- | -- | -- | -- | -- |
| Bulgaria | 19.9 | 23.5 | 30.6 | 23.0 | 20.8 |
| Czechoslovakia | 6.7 | 10.2 | 7.7 | 10.1 | 7.6 |
| GDR | 2.1 | 1.8 | 2.0 | 1.2 | 2.5 |
| Hungary | 28.9 | 42.4 | 43.3 | 46.3 | 55.7 |
| Poland | 148.8 | 96.9 | 105.1 | 94.2 | 106.9 |
| Romania | 26.5 | 19.0 | 19.5 | 20.0 | 8.9 |
| Yugoslavia | 85.2 | 64.6 | 56.3 | 65.3 | 60.9 |
| Total | 318.2 | 258.5 | 264.5 | 260.1 | 263.3 |

-- = Amount less than 1,000 tons, \$1 million, or not applicable.

1/ Principally tobacco and wine.

Source: Bureau of the Census, U.S. Department of Commerce.

Table 13. Volume and value of principal U.S. agricultural exports to Eastern Europe, 1/
1976-80 and 1981-85 averages and 1983-85 annual

| Commodity and country | Volume | | | | | Value | | | | |
|----------------------------------|------------|---------|-------|-------|------|-----------------|---------|-------|-------|-------|
| | 1976-80 2/ | 1981-85 | 1983 | 1984 | 1985 | 1976-80 2/ | 1981-85 | 1983 | 1984 | 1985 |
| | 1,000 tons | | | | | Million dollars | | | | |
| Total grain | | | | | | | | | | |
| Bulgaria | 230 | 319 | 102 | 44 | 269 | 27.8 | 41.7 | 13.8 | 6.0 | 28.8 |
| Czechoslovakia | 723 | 108 | 54 | -- | -- | 97.2 | 14.6 | 6.9 | -- | -- |
| GDR | 2,074 | 1,024 | 891 | 786 | 457 | 265.9 | 132.7 | 112.3 | 103.0 | 49.9 |
| Hungary | 44 | -- | 25 | -- | -- | 5.2 | -- | -- | -- | -- |
| Poland | 2,769 | 719 | 248 | 297 | 167 | 330.5 | 108.1 | 39.2 | 46.4 | 23.2 |
| Romania | 864 | 378 | -- | -- | 105 | 107.1 | 55.1 | -- | -- | 10.7 |
| Yugoslavia | 522 | 214 | 311 | 32 | -- | 73.0 | 28.4 | 42.2 | 4.0 | -- |
| Total | 7,226 | 2,762 | 1,631 | 1,159 | 998 | 906.7 | 178.9 | 214.4 | 159.4 | 112.6 |
| Wheat | | | | | | | | | | |
| Bulgaria | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Czechoslovakia | 165 | 1 | -- | -- | -- | 28.9 | 0.2 | -- | -- | -- |
| GDR | 294 | 49 | -- | -- | -- | 45.7 | 9.0 | -- | -- | -- |
| Hungary | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Poland | 617 | 73 | 74 | 116 | 85 | 83.1 | 12.0 | 11.9 | 18.8 | 12.3 |
| Romania | 244 | 13 | -- | -- | -- | 33.9 | 1.7 | -- | -- | -- |
| Yugoslavia | 250 | 131 | 311 | -- | -- | 41.9 | 18.5 | 42.2 | -- | -- |
| Total | 1,570 | 268 | 385 | 116 | 85 | 233.5 | 26.6 | 54.1 | 18.8 | 12.3 |
| Corn | | | | | | | | | | |
| Bulgaria | 240 | 307 | 102 | 44 | 210 | 27.8 | 40.6 | 13.8 | 6.4 | 23.3 |
| Czechoslovakia | 549 | 107 | 54 | -- | -- | 67.0 | 14.3 | 6.9 | -- | -- |
| GDR | 1,650 | 901 | 766 | 606 | 457 | 207.0 | 115.0 | 96.7 | 80.9 | 49.9 |
| Hungary | 21 | -- | -- | -- | -- | 2.4 | -- | -- | -- | -- |
| Poland | 1,840 | 617 | 162 | 173 | 78 | 212.1 | 87.7 | 22.1 | 25.5 | 9.9 |
| Romania | 544 | 365 | -- | -- | 105 | 66.1 | 53.2 | -- | -- | 10.7 |
| Yugoslavia | 254 | 77 | -- | -- | -- | 29.4 | 9.1 | -- | -- | -- |
| Total | 5,098 | 2,375 | 1,084 | 823 | 850 | 611.8 | 137.1 | 139.5 | 112.8 | 93.8 |
| Soybeans | | | | | | | | | | |
| Bulgaria | -- | 13 | -- | 23 | 22 | -- | 3.6 | -- | 6.9 | 5.0 |
| Czechoslovakia | 6 | 5 | -- | -- | 13 | 4.4 | 1.3 | -- | -- | 3.1 |
| GDR | 5 | 3 | -- | 12 | -- | 1.2 | 0.8 | -- | 3.6 | -- |
| Hungary | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Poland | 134 | 91 | 193 | 74 | -- | 35.6 | 23.4 | 48.7 | 20.5 | -- |
| Romania | 222 | 220 | 305 | 369 | 98 | 54.9 | 59.1 | 76.4 | 112.5 | 22.4 |
| Yugoslavia | 155 | 232 | 222 | 302 | 235 | 42.2 | 58.9 | 55.7 | 84.8 | 50.2 |
| Total | 522 | 564 | 720 | 780 | 368 | 138.3 | 125.1 | 180.8 | 228.3 | 80.7 |
| Vegetable oil | | | | | | | | | | |
| Bulgaria | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Czechoslovakia | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| GDR | 1 | -- | -- | -- | -- | 1.0 | -- | -- | -- | -- |
| Hungary | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Poland | 15 | 10 | 11 | 8 | 4 | 8.8 | 7.4 | 8.1 | 7.8 | 4.0 |
| Romania | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Yugoslavia | 4 | 31 | 132 | -- | -- | 2.4 | 13.4 | 54.7 | -- | -- |
| Total | 20 | 40 | 143 | 8 | 4 | 12.2 | 18.5 | 62.8 | 7.8 | 4.0 |
| Soybean meal and cake | | | | | | | | | | |
| Bulgaria | 73 | 71 | 35 | -- | -- | 16.9 | 16.8 | 8.6 | -- | -- |
| Czechoslovakia | 281 | 26 | 76 | -- | -- | 56.7 | 5.8 | 15.3 | -- | -- |
| GDR | 345 | 91 | 79 | -- | 47 | 75.7 | 22.4 | 17.4 | -- | 8.4 |
| Hungary | 95 | 91 | 209 | 141 | 105 | 22.8 | 20.0 | 50.8 | 30.5 | 18.7 |
| Poland | 356 | 146 | 155 | 210 | 81 | 76.1 | 34.5 | 37.9 | 45.9 | 13.9 |
| Romania | 158 | 80 | -- | -- | 24 | 36.0 | 21.1 | -- | -- | 4.7 |
| Yugoslavia | 133 | 82 | 201 | 59 | 59 | 27.8 | 18.3 | 44.7 | 11.1 | 12.7 |
| Total | 1,441 | 587 | 755 | 410 | 316 | 312.0 | 77.0 | 174.7 | 87.5 | 58.4 |

Continued--

Table 13. Volume and value of principal U.S. agricultural exports to Eastern Europe, 1/ 1976-80 and 1981-85 averages and 1983-85 annual, continued

| Commodity and country | Volume | | | | | Value | | | | |
|-----------------------|------------|------------|-------|-------|-------|-----------------|------------|-------|-------|-------|
| | 1976-80 | 2/ 1981-85 | 1983 | 1984 | 1985 | 1976-80 | 2/ 1981-85 | 1983 | 1984 | 1985 |
| | 1,000 tons | | | | | Million dollars | | | | |
| Cotton | | | | | | | | | | |
| Bulgaria | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Czechoslovakia | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| GDR | -- | -- | -- | 1 | 1 | -- | 0.4 | -- | 1.2 | 0.8 |
| Hungary | -- | -- | -- | -- | -- | -- | 0.1 | -- | 0.3 | -- |
| Poland | 8 | 1 | -- | -- | -- | 12.3 | -- | -- | -- | -- |
| Romania | 10 | -- | -- | -- | -- | 15.4 | -- | -- | -- | -- |
| Yugoslavia | -- | 19 | 47 | 19 | 28 | -- | 33.2 | 82.6 | 36.2 | 47.2 |
| Total | 18 | 21 | 47 | 20 | 29 | 27.7 | 33.7 | 82.6 | 37.7 | 48.0 |
| Cattle hides 3/ | | | | | | | | | | |
| Bulgaria | 41 | 32 | -- | 64 | 79 | 1.1 | 1.3 | 0.8 | 2.8 | 3.1 |
| Czechoslovakia | 589 | 464 | 484 | 670 | 418 | 15.2 | 14.3 | 13.5 | 25.5 | 13.9 |
| GDR | 33 | 1 | -- | -- | -- | 0.7 | 0.1 | 0.2 | -- | -- |
| Hungary | 183 | 99 | 89 | 152 | 39 | 3.9 | 3.3 | 2.8 | 6.6 | 1.6 |
| Poland | 441 | 402 | 293 | 320 | 403 | 12.6 | 12.1 | 7.3 | 12.3 | 13.5 |
| Romania | 1,486 | 1,028 | 1,319 | 1,032 | 1,169 | 38.8 | 34.5 | 40.8 | 41.5 | 41.0 |
| Yugoslavia | 461 | 365 | 306 | 676 | 383 | 9.9 | 15.7 | 11.4 | 33.1 | 16.3 |
| Total | 3,234 | 2,390 | 2,491 | 2,914 | 2,491 | 82.2 | 71.9 | 76.8 | 121.8 | 89.4 |
| Other | | | | | | | | | | |
| Bulgaria | -- | -- | -- | -- | -- | 4.9 | 7.5 | 13.9 | 1.3 | 14.0 |
| Czechoslovakia | -- | -- | -- | -- | -- | 10.3 | 1.4 | 0.8 | 2.9 | 2.4 |
| GDR | -- | -- | -- | -- | -- | 3.5 | 7.6 | 9.6 | 21.4 | 5.8 |
| Hungary | -- | -- | -- | -- | -- | 4.6 | 5.9 | 4.5 | 5.2 | 15.0 |
| Poland | -- | -- | -- | -- | -- | 42.6 | 44.0 | 64.3 | 61.5 | 37.6 |
| Romania | -- | -- | -- | -- | -- | 5.8 | 1.7 | 0.9 | 3.1 | 2.6 |
| Yugoslavia | -- | -- | -- | -- | -- | 26.6 | 11.9 | 12.9 | 19.7 | 8.6 |
| Total | -- | -- | -- | -- | -- | 98.3 | 80.0 | 106.9 | 115.1 | 86.0 |
| Total | | | | | | | | | | |
| Bulgaria | -- | -- | -- | -- | -- | 50.7 | 73.3 | 37.1 | 17.0 | 50.9 |
| Czechoslovakia | -- | -- | -- | -- | -- | 183.8 | 37.9 | 36.5 | 28.4 | 19.4 |
| GDR | -- | -- | -- | -- | -- | 348.0 | 163.9 | 139.5 | 129.2 | 64.9 |
| Hungary | -- | -- | -- | -- | -- | 36.5 | 31.2 | 58.1 | 42.6 | 35.3 |
| Poland | -- | -- | -- | -- | -- | 518.5 | 253.8 | 205.5 | 194.4 | 92.2 |
| Romania | -- | -- | -- | -- | -- | 258.0 | 172.9 | 118.1 | 157.1 | 81.4 |
| Yugoslavia | -- | -- | -- | -- | -- | 181.9 | 182.4 | 304.2 | 188.9 | 135.0 |
| Total | -- | -- | -- | -- | -- | 1,577.4 | 915.2 | 899.0 | 757.6 | 479.1 |

-- = Amount less than 1,000 tons or \$1 million.

1/ Including estimated transshipments through Belgium, Canada, the Federal Republic of Germany, and the Netherlands from 1976-83. Beginning in 1984, transshipments other than through Canada are no longer being calculated, because of their decline in value and the difficulty in obtaining data. Canadian transshipments are included in direct exports. 2/ The 1981-85 average includes only Canadian transshipments. 3/ 1,000 pieces.

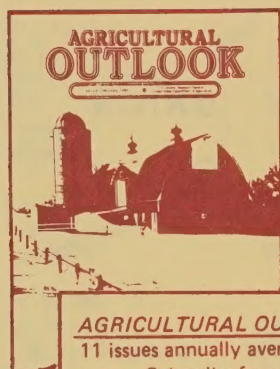
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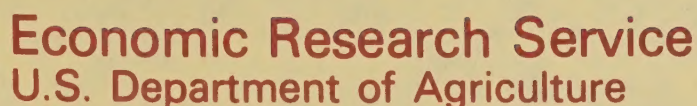
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